DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 4-10-2003
Weather: Cloudy, Windy, 40s
Observer: Eric Rogge

Activities:

____	**Site Preparation**	____	**Suction Pipe Installation**
____	**Manhole Installation**	X	**Water Discharge to Treatment Plant**
X	**Trench Construction**	____	**Other**____
____	**Soil Characterization**	____	**Other**____
____	**Soil Disposal**		

Description of Activities & Observations:

- Advanced trench 10 feet. Found suction line and air suction line for EW-11. Shut down the treatment plant, pipes were cut with a hacksaw and the water in the lines was allowed to drain into the trench. The pipes were capped on both sides of the trench to prevent soil from entering.
- Advanced trenchbox 10 feet.
- Installed 10-foot section of perforated pipe and the required graded filter stone backfill.
- Stone was placed approximately 4-inches higher than required because the stone has been settling when the trenchbox is advanced in the trench.
- Pumped water from the frac tanks to the treatment plant.
- Placed and compacted select fill and structural fill in the trench outside the trenchbox.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	CAT 966G Loader	Diesel Air Compressor
Harold Bohl	Foreman	CAT 330L Excavator	
Cliff Brock	Operating Engineer	3 Trench Boxes	
Art Miekens	Operating Engineer	2 20,000 gal. Frac Tanks	
Yvonne Stillis	Skilled Laborer	Diesel Generator	
Creianton Richardson	Skilled Laborer		

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 4-14-03
Weather: Sunny, 50s
Observer: Eric Rogge

Activities:

____	Site Preparation	____	Suction Pipe Installation
____	Manhole Installation	X	Water Discharge to Treatment Plant
X	Trench Construction	____	Other____
X	Soil Characterization	____	Other____
____	Soil Disposal		

Description of Activities & Observations:

- Maxy was on-site on 4-13-03 to dewater the trench. Trench filled to top with water over the weekend, but did not overflow. Maxy pumped water to frac tanks from 3pm to 3am and filled both frac tanks.
- Began pumping frac tanks to treatment plant first thing in the morning. The treatment plant went offline while pumping and the O/W separator overflowed.
- Placed 4-foot high by 16-foot long trenchbox next to monitoring well 14 (MW-14). Tied monitoring well to trenchbox as an anchor. Trench will be several feet away from the well and there were concerns of the well falling into the trench.
- Advanced trench and trenchbox 10 feet. Found piece of a drum filled with solid and crystalline product. The drum was placed to the side in the soil stockpile area until it is decided what to do with it.
- Found suction and air suction lines to EW-12. Lines were cut and capped.
- Installed 10-foot section of perforated pipe and required graded filter stone backfill.
- Took 1 composite sample and 5 grab samples from the soil stockpile for testing as required by the disposal facility.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	CAT 966G Loader	Diesel Air Compressor
Harold Bohl	Foreman	CAT 330L Excavator	
Cliff Brock	Operating Engineer	3 Trench Boxes	
Art Miekens	Operating Engineer	2 20,000 gal. Frac Tanks	
Yvonne Stillis	Skilled Laborer	Diesel Generator	
Creianton Richardson	Skilled Laborer		

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 4-15-03
Weather: Sunny, 60s
Observer: Eric Rogge

Activities:

____	Site Preparation	____	Suction Pipe Installation
____	Manhole Installation	X	Water Discharge to Treatment Plant
X	Trench Construction	____	Other_____
____	Soil Characterization	____	Other_____
____	Soil Disposal		

Description of Activities & Observations:

- Pumped remainder of 2nd frac tank to the treatment plant.
- A steel plate was driven into the ground between MW-14 and the trench to prevent soil from caving into the trench.
- Advanced the trench 10 feet. Found suction and air suction lines to EW-10 and EW-13. Cut and capped suction and air suction lines. Found half of a crushed drum and several pieces of drums, placed in soil stockpile with previously found drum pieces.
- Advanced trench box 10 feet. Installed 10-foot section of perforated pipe and required graded filter stone backfill.
- Pumping water in small puddles in front of soil stockpile area to the north. The equipment is leaving ruts in the soft, wet ground. By pumping the puddles dry, Maxy will make the ground more firm.
- Left the soil stockpiles uncovered for the night to help dry out the soil and decrease the weight.
- Extended new soil stockpile 10-feet to the southwest.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	CAT 966G Loader	Diesel Air Compressor
Harold Bohl	Foreman	CAT 330L Excavator	
Cliff Brock	Operating Engineer	3 Trench Boxes	
Art Miekens	Operating Engineer	2 20,000 gal. Frac Tanks	
Yvonne Stillis	Skilled Laborer	Diesel Generator	
Creianton Richardson	Skilled Laborer		

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT

ADDENDUM 1

CHESTER WATERFRONT REDEVELOPMENT PROJECT

CHESTER, PENNSYLVANIA

Date: 4-16-03

Weather: Sunny, 70s

Observer: Eric Rogge

Activities:

_____	**Site Preparation**	_____	**Suction Pipe Installation**
_____	**Manhole Installation**	_____	**Water Discharge to Treatment Plant**
X	**Trench Construction**	_____	**Other**_____
_____	**Soil Characterization**	_____	**Other**_____
_____	**Soil Disposal**		

Description of Activities & Observations:

- Advanced trench 10 feet. Found half a drum filled with solid, crystalline, and liquid product. Also found crushed drum with no contents. Placed in soil stockpile with other drum pieces.
- Advanced trenchbox 10 feet. Installed 10-foot section of perforated pipe and required graded filter stone backfill.
- Continued pumping water from puddles in front of soil stockpile area to the north.
- Placed and compacted select fill and structural fill in the trench near EW-11 and 12. Filled up to invert of suction and air suction pipes. Shut down treatment plant and installed new 2-inch PVC pipe, reconnecting EW-11 and 12. Turned the treatment plant on and listened for leaks around the new joints. Spread 6-inches of type 1 stone around the pipes.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	CAT 966G Loader	Diesel Air Compressor
Harold Bohl	Foreman	CAT 330L Excavator	
Cliff Brock	Operating Engineer	3 Trench Boxes	
Art Miekens	Operating Engineer	2 20,000 gal. Frac Tanks	
Yvonne Stillis	Skilled Laborer	Diesel Generator	
Creianton Richardson	Skilled Laborer		

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Nw1 Date: 4-17-03
Weather: Cloudy, 40s
Observer: Eric Rogge

Activities:

_____	**Site Preparation**	_____	**Suction Pipe Installation**
_____	**Manhole Installation**	X	**Water Discharge to Treatment Plant**
X	**Trench Construction**	_____	**Other**_____
_____	**Soil Characterization**	_____	**Other**_____
_____	**Soil Disposal**		

Description of Activities & Observations:

- Advanced trench 10 feet. Observed drum fragments at base of trench wall. Will leave pieces in place to prevent collapsing of the trench wall.
- Advanced trenchbox 10 feet. Installed 10-feet of perforated pipe and the required graded filter stone backfill.
- Pumped water from frac tanks to treatment plant.
- Placed and compacted select fill and structural fill in the trench behind the trenchbox.
- Unable to connect EW-10 and EW-13 permanently or temporarily for the weekend. The pipes were behind the trenchbox and the trench sidewalls were starting to collapse.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	CAT 966G Loader	Diesel Air Compressor
Harold Bohl	Foreman	CAT 330L Excavator	
Cliff Brock	Operating Engineer	3 Trench Boxes	
Art Miekens	Operating Engineer	2 20,000 gal. Frac Tanks	
Yvonne Stillis	Skilled Laborer	Diesel Generator	
Creianton Richardson	Skilled Laborer		

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 4-21-03
Weather: Cloudy, 60s
Observer: Eric Rogge

Activities:

____	Site Preparation	____	Suction Pipe Installation
____	Manhole Installation	X	Water Discharge to Treatment Plant
X	Trench Construction	____	Other ____
____	Soil Characterization	____	Other ____
____	Soil Disposal		

Description of Activities & Observations:

- Consolidated old soil stockpile, then extended it towards the road.
- Advanced the trench 18-feet. Placed the 16-foot long trenchbox in the trench.
- Possibility of rain and thunderstorms, built berm around northwest side of the trench and covered the soil stockpile.
- Installed a 20-foot section of perforated pipe and the required graded filter stone backfill. Pipe ends 3-feet farther than required on the engineering drawings. The end of the pipe was capped.
- Pumped from frac tanks to treatment plant in the morning. The rope skimmer in the treatment plant broke, Maxy will not pump to the treatment plant until the rope skimmer is repaired.

Visitors: ____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	CAT 966G Loader	Diesel Air Compressor
Cliff Brock	Operating Engineer	CAT 330L Excavator	
Art Miekens	Operating Engineer	3 Trench Boxes	
Yvonne Stillis	Skilled Laborer	2 20,000 gal. Frac Tanks	
Creianton Richardson	Skilled Laborer	Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 4-22-03
Weather: Cloudy, 60s
Observer: Eric Rogge

Activities:

_____	Site Preparation	_____	Suction Pipe Installation
_____	Manhole Installation	_____	Water Discharge to Treatment Plant
X	Trench Construction	_____	Other_____
_____	Soil Characterization	_____	Other_____
_____	Soil Disposal		

Description of Activities & Observations:

- Completed placing graded filter stone backfill in the final 20-foot section of the trench.
- Trench sidewalls unstable.
- Spread and compacted select fill and structural fill inside the trenchboxes. The trenchboxes were lifted progressively as the more lifts of fill were placed.
- The steel plate that was supporting the soil between MW-14 and the trench was left in place. The steel plates supporting the trench sidewalls in the EW line area were left. If the plates were moved, the falling soil could break the EW lines.
- Both trenchboxes were removed from the ground.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		Equipment	
Chester Trzcinski	Foreman	CAT 966G Loader	Diesel Air Compressor
Cliff Brock	Operating Engineer	CAT 330L Excavator	
Art Miekens	Operating Engineer	3 Trench Boxes	
Yvonne Stillis	Skilled Laborer	2 20,000 gal. Frac Tanks	
Creianton Richardson	Skilled Laborer	Diesel Generator	

Subcontractors

Crew		Equipment	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

Eric S. Poage (signature)

Reviewed by: (signature)

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 4-23-03
Weather: Cloudy, 50s
Observer: Eric Rogge

Activities:

____	Site Preparation	____	Suction Pipe Installation
____	Manhole Installation	____	Water Discharge to Treatment Plant
X	Trench Construction	____	Other_____
____	Soil Characterization	____	Other_____
X	Soil Disposal		

Description of Activities & Observations:

- Trucks on-site to began removing the asbestos contaminated soil. A total of 4 trucks transported 70.85 tons of soil to G.R.O.W.S., Inc. in Morrisville, PA.
- Moved trenchboxes to the paved area to begin disassembly. Trenchboxes were then transported off-site.
- Gary Sheehan and Bob Crane on-site repairing the rope skimmer.
- Shut treatment system down and opened caps on the suction and air suction lines for EW-10 and 13. Allowed water to drain into trench. Reconnected suction and air suction lines with new 2" PVC pipe and 6-inches of stone around them.
- Vacuum at treatment plant steady at 12 inHG. Will check tomorrow and see if the number is the same.
- Measured pieces of concrete debris removed from the trench. There is approximately 22 CY of concrete and 4.95 CY of concrete over 1 CY in size. Quantities were needed to get a price for breaking up the concrete to smaller pieces.
- Laborers cleaning up debris and equipment.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	CAT 966G Loader	Diesel Air Compressor
Cliff Brock	Operating Engineer	CAT 330L Excavator	
Art Miekens	Operating Engineer	3 Trench Boxes	
Yvonne Stillis	Skilled Laborer	2 20,000 gal. Frac Tanks	
Creianton Richardson	Skilled Laborer	Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

Eric S. Poggi (signature)

Reviewed by: (signature)

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 4-24-03
Weather: Sunny, 60s
Observer: Eric Rogge

Activities:

____	Site Preparation	____	Suction Pipe Installation
____	Manhole Installation	X	Water Discharge to Treatment Plant
X	Trench Construction	____	Other_____
____	Soil Characterization	____	Other_____
____	Soil Disposal		

Description of Activities & Observations:

- Vacuum at treatment plant fluctuating between 12 and 15 inHG. Talked to Gary Sheehan and Atilla Rigo, the vacuum appears to be normal. There is no reason to suspect a leak in the suction and air suction lines.
- Backhoe with a jackhammer attachment was rented for the day to break up the concrete debris pulled from the trench. The rental company provided an operator for the backhoe.
- Pumping water from the frac tanks to the treatment plant.
- Mike Watkins and Kimberly Scarborough on-site.
- Finished spreading Type 1 stone around the EW lines. Spread and compacted structural fill around and above the EW lines.
- Attached grading bucket to excavator.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	CAT 966G Loader	Diesel Air Compressor
Cliff Brock	Operating Engineer	CAT 330L Excavator	
Art Miekens	Operating Engineer	1 Trench Box	
Yvonne Stillis	Skilled Laborer	2 20,000 gal. Frac Tanks	
Creianton Richardson	Skilled Laborer	Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 4-28-03
Weather: Sunny
Observer: Eric Rogge

Activities:

_____	Site Preparation	_____	Suction Pipe Installation
_____	Manhole Installation	_____	Water Discharge to Treatment Plant
_____	Trench Construction	_____	Other_____
_____	Soil Characterization	_____	Other_____
X	Soil Disposal		

Description of Activities & Observations:

- Loading out soil stockpiles into trucks using the excavator.
- Using calcium chloride for dust control.
- 31 truckloads of soil were transported to Clean Earth in Philadelphia.
- Bag filters were filled with product, the product was poured into the O/W separator in the treatment plant. The filters were then replaced.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	CAT 966G Loader	Diesel Air Compressor
Cliff Brock	Operating Engineer	CAT 330L Excavator	
Art Miekens	Operating Engineer	1 Trench Box	
Yvonne Stillis	Skilled Laborer	2 20,000 gal. Frac Tanks	
Creianton Richardson	Skilled Laborer	Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

Eric D. Poggi (signature)

Reviewed by: (signature)

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 4-29-03
Weather: Cloudy, 60s => Rain
Observer: Eric Rogge

Activities:

_____	**Site Preparation**	_____	**Suction Pipe Installation**
_____	**Manhole Installation**	_____	**Water Discharge to Treatment Plant**
_____	**Trench Construction**	_____	**Other**_____
_____	**Soil Characterization**	_____	**Other**_____
X	**Soil Disposal**		

Description of Activities & Observations:

- Chet is at Jury duty in the morning. Art was left in charge.
- Loading soil from both stockpile areas to trucks. The front-end loader was moved into the soil stockpile area and will remain inside to prevent stained from being tracked on the site.
- As soil is loaded to trucks the poly underneath is ripped. Not feasible to try to load with out hitting the poly. The loader will be used to scrape the ground and remove any stained soil.
- 31 loads of soil were transported to Clean Earth in Philadelphia.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	CAT 966G Loader	Diesel Air Compressor
Cliff Brock	Operating Engineer	CAT 330L Excavator	
Art Miekens	Operating Engineer	1 Trench Box	
Yvonne Stillis	Skilled Laborer	2 20,000 gal. Frac Tanks	
Creianton Richardson	Skilled Laborer	Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 4-30-03
Weather: Sunny, 60s
Observer: Eric Rogge

Activities:

_____	**Site Preparation**	_____	**Suction Pipe Installation**
_____	**Manhole Installation**	_____	**Water Discharge to Treatment Plant**
_____	**Trench Construction**	_____	**Other**_____
_____	**Soil Characterization**	_____	**Other**_____
X	**Soil Disposal**		

Description of Activities & Observations:

- Continued loading soil to trucks.
- Scraped stained soil from old soil stockpile area. Moved scraped soil/mud from area next to trench to old soil stockpile area. Soil will fill in any areas were existing soil was removed during scraping.
- 25 loads of soil were transported to Clean Earth in Philadelphia.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	CAT 966G Loader	Diesel Air Compressor
Cliff Brock	Operating Engineer	CAT 330L Excavator	
Art Miekens	Operating Engineer	1 Trench Box	
Yvonne Stillis	Skilled Laborer	2 20,000 gal. Frac Tanks	
Creianton Richardson	Skilled Laborer	Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 5-1-03
Weather: Cloudy, 60s
Observer: Eric Rogge

Activities:

_____ **Site Preparation**
_____ **Manhole Installation**
_____ **Trench Construction**
_____ **Soil Characterization**
_____ **Soil Disposal**
_____ **Suction Pipe Installation**
_____ **Water Discharge to Treatment Plant**
_____ **Other**_____
_____ **Other**_____

Description of Activities & Observations:

- The facility is not accepting waste today. No soil will be transported to Clean Earth in Philadelphia.
- A small amount of soil remains on-site. A new soil stockpile was built in the area of the previous soil stockpile. Remaining contaminated soil was moved to this soil stockpile.
- Areas where stained soil came in contact with the existing ground were scraped and the scrapings were moved to the soil stockpile.
- Weekly conference call.
- This will be Cliff's last day on-site. Only one operator will be needed for the remainder of the project.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	CAT 966G Loader	Diesel Air Compressor
Cliff Brock	Operating Engineer	CAT 330L Excavator	
Art Miekens	Operating Engineer	1 Trench Box	
Yvonne Stillis	Skilled Laborer	2 20,000 gal. Frac Tanks	
Creianton Richardson	Skilled Laborer	Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 5-5-03
Weather: Rain, 40s
Observer: Eric Rogge

Activities:

_____	**Site Preparation**	_____	**Suction Pipe Installation**
_____	**Manhole Installation**	_____	**Water Discharge to Treatment Plant**
_____	**Trench Construction**	X	**Other: Grading**
_____	**Soil Characterization**	_____	**Other**
_____	**Soil Disposal**		

Description of Activities & Observations:

- A backhoe was brought on-site and will be used to dig the suction header trench.
- Spread more stripped topsoil from the area near the trench in the soil stockpile area. Stones and rocks were removed from the topsoil.
- Rye seed was spread on soil stockpile area. A layer of hay was also spread above the seeds on the area.
- The excavator was used to remove lose soil from the ground in the suction header trench area.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	CAT 966G Loader	Diesel Air Compressor
Art Miekens	Operating Engineer	CAT 330L Excavator	
		1 Trench Box	
Creighton Richardson	Skilled Laborer	2 20,000 gal. Frac Tanks	
		Diesel Generator	
		Case backhoe	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

d Date: 5-6-03
Weather: Overcast, 40s
Observer: Eric Rogge

Activities:

_____ **Site Preparation**
_____ **Manhole Installation**
_____ **Trench Construction**
_____ **Soil Characterization**
_____ **Soil Disposal**
__X__ **Suction Pipe Installation**
_____ **Water Discharge to Treatment Plant**
_____ **Other**_____
_____ **Other**_____

Description of Activities & Observations:

- Mike Watkins on-site.
- Maxy began excavating for the suction header trench. Began excavating at manhole T1. Soil was contaminated at a depth of 1.5-feet. An OVM was used to verify the soil was contaminated. Contaminated soil being temporarily placed on poly next to the trench and the unstained soil being stockpiled on the opposite side of the trench.
- OVM readings in trench approximately 4 ppm. Workers wearing respirators because of the smell.
- Contaminated soil moved from the poly to the soil stockpile area.
- The suction lateral opening in manhole T2 was diamond core drilled larger to accept the 4-inch diameter pipe specified in the design modification. An additional hole was diamond cored for the electrical conduit.
- The suction lateral opening in manhole T1 was diamond core drilled larger to accept the 4-inch diameter pipe.
- The front end loader was demobilized.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	CAT 966G Loader	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	2 20,000 gal. Frac Tanks	
		Diesel Generator	
		Case backhoe	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

Eric S Royce **(signature)**

Reviewed by: JR Cooper **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 5-7-03
Weather: Cloudy, 70s
Observer: Eric Rogge

Activities:

_____	**Site Preparation**	X	**Suction Pipe Installation**
_____	**Manhole Installation**	_____	**Water Discharge to Treatment Plant**
_____	**Trench Construction**	_____	**Other**_____
X	**Soil Characterization**	_____	**Other**_____
_____	**Soil Disposal**		

Description of Activities & Observations:

- Continued digging suction pipe trench. All excavated soil was stained and read positive on the OVM. Spread and compacted 6-inches of type 1 stone in the trench.
- Diamond core drilled a hole in manhole T1 for the electrical conduit.
- Built a berm along the trench on the access road side using stripped topsoil.
- Began laying 6-inch suction header pipe starting at manhole T1.
- Maxy sampled the soil stockpile. 3 composite sample and 14 grab samples were taken as required by the disposal facility.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	2 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

Eric S Rezge (signature)

Reviewed by: (signature)

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 5-8-03
Weather: Overcast, 60s => Showers
Observer: Eric Rogge

Activities:

_____ Site Preparation	__X__ Suction Pipe Installation
_____ Manhole Installation	_____ Water Discharge to Treatment Plant
_____ Trench Construction	_____ Other_____
_____ Soil Characterization	_____ Other_____
_____ Soil Disposal	

Description of Activities & Observations:

- Continued suction header trench beginning at manhole T2 moving towards termination point. Excavated soil stained with positive readings on the OVM. Soil placed on poly next to the trench and moved to the soil stockpile at the end of the day.
- Weekly conference call.
- Backfilled stone above the suction header between the joints.
- Installed suction header cleanout riser near manhole T1. Installed lateral and "Y" at manhole T2. A 22.5 degree elbow was installed just after the location where the manhole T2 lateral joins the suction header.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	2 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 5-12-03
Weather: Sunny, 60s => Windy
Observer: Eric Rogge

Activities:

_____	**Site Preparation**	__X__	**Suction Pipe Installation**
_____	**Manhole Installation**	_____	**Water Discharge to Treatment Plant**
_____	**Trench Construction**	_____	**Other**_____
_____	**Soil Characterization**	_____	**Other**_____
_____	**Soil Disposal**		

Description of Activities & Observations:

- Continued excavating suction header trench to termination point. All excavated soil stained with positive OVM readings. All excavated soil placed on poly next to the trench.
- Spread and compacted 6-inches of type 1 stone on the bottom of the trench. Installed 6-inch suction header pipe to termination point and capped. Installed cleanout just before the 2nd 22.5-degree elbow.
- Added type 1 stone to a height 4-inches above the header pipe in areas between pipe joints.
- Began installing piping inside manhole T1. Pipe will not fit as intended due to larger size of 4-inch ball valve and fittings. Choose alternate layout with the union fitting near small manhole opening, ball valve under large manhole opening, and downpipe on the wall next to the steps.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		Equipment	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	2 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		Equipment	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

Eric S Rygg (signature)

Reviewed by: (signature)

DAILY FIELD REPORT

ADDENDUM 1

CHESTER WATERFRONT REDEVELOPMENT PROJECT

CHESTER, PENNSYLVANIA

Date: 5-13-03

Weather: Cloudy, Windy, 60s

Observer: Eric Rogge

Activities:

_____	**Site Preparation**	X	**Suction Pipe Installation**
_____	**Manhole Installation**	_____	**Water Discharge to Treatment Plant**
_____	**Trench Construction**	_____	**Other**_____
_____	**Soil Characterization**	_____	**Other**_____
_____	**Soil Disposal**		

Description of Activities & Observations:

- Completed construction of piping inside manhole T1. Downpipe attached to manhole wall next to steps. Two anchors were used to secure the downpipe to the manhole side. The valve was installed with the handle on it's side for access from the large manhole opening.
- Installed piping in manhole T2, piping was installed in the same orientation as manhole T1.
- Shut valves in both manholes and began pumping river water into the cleanout near manhole T2. Water appeared dirty. Moved the pump to the boat slip and pumped the water into the cleanout near manhole T1. Filled entire pipe system for pressure test 5-14.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	2 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 5-14-03
Weather: Cloudy, 50s
Observer: Eric Rogge

Activities:

_____	**Site Preparation**	__X__	**Suction Pipe Installation**
_____	**Manhole Installation**	_____	**Water Discharge to Treatment Plant**
_____	**Trench Construction**	_____	**Other**_____
_____	**Soil Characterization**	_____	**Other**_____
_____	**Soil Disposal**		

Description of Activities & Observations:

- Fabricated special caps for both cleanouts, one with a ball valve for bleeding air out of the system, and the other to connect a gas powered pressure pump.
- Moved soil on poly next to suction header trench to the soil stockpile.
- The pipe testing procedure consists filling the pipe with water, pressurizing the pipe to 50 psi, and waiting 2 hours monitoring the pressure in the system. Any drop in the pressure would indicate a leak. All joints and fittings were left uncovered to ease in finding any leaks.
- Attached a gas powered water pump to the cleanout near manhole T1. The compressor attachment has pressure gauges in line before the connection to the cleanout. Ball valve attached to the cleanout near manhole T2.
- Both fabricated cleanout caps began leaking from the threads before the system reached 50 psi. Rethreaded caps using thread sealant.
- Repressurized system to 50 psi. The valves in each manhole were opening slightly to let any trapped air escape. When 50 psi was reached the gas pump was shut off (3:35 PM). After 2 hours (5:35 PM) the pressure in the system was still 50 psi. The pressure was released from the cleanout near manhole T1.
- Cleaned out 2nd frac tank using Speed-E Dry and brooms. Material was shoveled into bags and placed in the soil stockpile. All hatches were opened on the tank during cleaning, each end hatch and the top hatch. Respirators were worn.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	2 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 5-15-03
Weather: Cloudy, 50s
Observer: Eric Rogge

Activities:

_____	**Site Preparation**	__X__	**Suction Pipe Installation**
_____	**Manhole Installation**	_____	**Water Discharge to Treatment Plant**
_____	**Trench Construction**	_____	**Other**_____
_____	**Soil Characterization**	_____	**Other**_____
_____	**Soil Disposal**		

Description of Activities & Observations:

- Placed type 1 stone in joint and fitting areas in the suction header trench. Filled to 4-inches above suction header and compacted.
- Cleaned inside of 2nd frac tank using Speed-E Dry.
- Built berm around uphill side of the suction header trench using stripped topsoil.
- Weekly conference call.
- Began placing electrical conduit starting at manhole T1. First electrical pull box placed near manhole T1, conduit placed down onto stone with elbows going up into the pullbox. Placed remaining electrical conduit, including the manhole T2 lateral conduit, in the trench up to the termination point. The next two pull boxes were installed, one near manhole T2 and one near the termination point.
- Filled gap between manholes and pipes using non-shrink grout.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	2 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 5-19-03
Weather: Sunny, 60s
Observer: Eric Rogge

Activities:

_____ **Site Preparation**
_____ **Manhole Installation**
_____ **Trench Construction**
_____ **Soil Characterization**
_____ **Soil Disposal**
__X__ **Suction Pipe Installation**
_____ **Water Discharge to Treatment Plant**
_____ **Other**_____
_____ **Other**_____

Description of Activities & Observations:

- Cleaning inside of 2nd frac tank using Go-Jo.
- Spread 6-inches of type 1 stone in suction header trench above the electrical conduit. Spread and compacted structural fill above the type 1 stone. Laid detectable tape marking location of the electric line in the trench 12-inches above the electric conduit.
- Pull box covers were brought up to the proper grade using brick and mortar.
- Filled suction header trench up to grade with structural fill. The termination end of the trench was left open.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	2 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 5-20-03
Weather: Sunny, 60s
Observer: Eric Rogge

Activities:

_____ Site Preparation	__X__ Suction Pipe Installation
_____ Manhole Installation	_____ Water Discharge to Treatment Plant
_____ Trench Construction	_____ Other_____
_____ Soil Characterization	_____ Other_____
_____ Soil Disposal	

Description of Activities & Observations:

- Graded work area with backhoe.
- Removed temporary sump near manhole T2. Pulled out the submersible pump and wrapped with poly. Filled sump with type 1 stone up to El. 2.64. Placed piece of geotextile above stone. Placed a 2-foot thick layer of select fill in the sump and tamped with a 2x4. Pulled off 4-foot long upper section of corrugated sump pipe and filled the area with structural fill.
- Grouted manhole seal area on both manholes in any areas were the sealing edge was damaged.
- Created a temporary road on the river side of the work area. Road will go around the suction header trench work area. Marked out manholes and MW-14 with stakes, rope, and paint.
- Cleaned the 2nd frac tank with Go-Jo. Moved frac tank to paved area using the excavator.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	2 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 5-21-03
Weather: Rain, 50s
Observer: Eric Rogge

Activities:

_____ **Site Preparation**
_____ **Manhole Installation**
_____ **Trench Construction**
_____ **Soil Characterization**
_____ **Soil Disposal**
__X__ **Suction Pipe Installation**
_____ **Water Discharge to Treatment Plant**
_____ **Other**_____
_____ **Other**_____

Description of Activities & Observations:

- Placed and compacted structural fill around manhole T1, pullbox, and cleanout.
- 2nd frac tank sent off-site. 1st frac tank was moved to the large paved area. The tank was moved with the excavator and still contained approximately 1-foot of product.
- Placed and compacted structural fill around manhole T2.
- Received verbal o.k. for the design modification and change order from Exelon.
- Additional suction header pipe and electrical conduit delivered to the site.
- A location to end the suction header near the treatment plant was chosen. The location is 36-inches from the north-west vent grate on the treatment plant. This location will give the option of running the pipe under the plant and up through the floor or up the outside of the building and through the wall.
- Cleared vegetation and debris from the path of the suction header trench extension area. Moved all vegetation and debris to the side of the work area. The approximate location of the existing suction header was marked out with stakes.
- Monitoring well near the boat slip at the south-west edge of work area that had been knocked over has now been pulled completely out of the ground.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		Equipment	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	2 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		Equipment	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 5-22-03
Weather: Overcast, 40s
Observer: Eric Rogge

Activities:

_____ **Site Preparation**
_____ **Manhole Installation**
_____ **Trench Construction**
_____ **Soil Characterization**
_____ **Soil Disposal**
__X__ **Suction Pipe Installation**
_____ **Water Discharge to Treatment Plant**
_____ **Other**_____
_____ **Other**_____

Description of Activities & Observations:

- Continued excavated suction header. Soil from the excavation was stained and showed high readings on the OVM.
- Installed 40-feet of suction header pipe. Spread type 1 stone over the pipe between the joints.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	2 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 5-27-03
Weather: Cloudy, 60s
Observer: Eric Rogge

Activities:

____ Site Preparation	__X__ Suction Pipe Installation
____ Manhole Installation	__X__ Water Discharge to Treatment Plant
____ Trench Construction	____ Other_____
____ Soil Characterization	____ Other_____
____ Soil Disposal	

Description of Activities & Observations:

- Suction header trench filled with water from rain over the weekend. The installed pipe floated up with the rising water and pulled itself out of the stone bedding. The banks of the trench fell down in several places.
- Fence subcontractor on-site. Removed fence into treatment plant trailer where the suction header trench passes through.
- Moved the bag filters back to their original location near the treatment plant. The frac tanks have been moved out of the area, so water will be pumped directly from the trench through the bag filters to the treatment plant.
- Began excavating suction header trench starting from the treatment plant while the open trench was pumped dry. Most of the soil from the excavation was not stained and did not have an odor. This soil was placed to the side of the trench furthest from the river. The smaller amount of stained soil was placed on poly on the opposite side of the trench.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	2 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 5-28-03
Weather: Cloudy, 50s
Observer: Eric Rogge

Activities:

_____ Site Preparation	__X__ Suction Pipe Installation
_____ Manhole Installation	__X__ Water Discharge to Treatment Plant
_____ Trench Construction	_____ Other_____
_____ Soil Characterization	_____ Other_____
_____ Soil Disposal	

Description of Activities & Observations:

- Pumped water from the flooded suction header trench through the bag filters to the treatment plant.
- Finished excavating for the suction header trench. Most of the soil for the day was stained.
- Working on the flooded section of the trench. Suspended the pipe from 4x4s laid across the trench. Dug out any washed in soil, if the soil was stained it was placed on poly next to the trench. Enough stone was removed to put the pipe back at the proper depth. The last section of pipe was cut off because the there was too much washed in soil in the area.
- Measured size of soil stockpile for the purpose of getting a volume of soil remaining to be disposed. Total weight of soil in stockpile is approximately 850 tons, assuming a density of 1.75 tons/CY. The weight of the soil from the trench that is not in the soil stockpile is 90 tons.
- Installed the suction header pipe up to the treatment plant. A cleanout was installed at approximately the halfway point in the pipe run. An elbow was installed at the treatment plant end of the pipe running up the outside of the building.
- Spread type 1 stone around the pipe between the joints and fittings.
- Stained soil adjacent to the trench was covered with poly for the night.
- Filled the pipe was water from the river to prevent it from floating if the trench was to flood.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		Equipment	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	2 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		Equipment	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 5-29-03
Weather: Cloudy, 60s
Observer: Eric Rogge

Activities:

_____ **Site Preparation**	__X__ **Suction Pipe Installation**
_____ **Manhole Installation**	_____ **Water Discharge to Treatment Plant**
_____ **Trench Construction**	_____ **Other**_____
_____ **Soil Characterization**	_____ **Other**_____
_____ **Soil Disposal**	

Description of Activities & Observations:

- Moved stained soil from the suction header trench excavation to the soil stockpile. The soil stockpile was first enlarged.
- Began pressure testing the entire suction header system. The compressor was attached to the cleanout near manhole T1 and the air release valve was installed on cap at the treatment plant. Both cleanout caps in between were leaking. One of the caps shattered under the pressure. Heavier duty schedule 40 caps were found and installed. Restarted pressure test, adapter caps for the compressor and the air release valve both cracked and began leaking. The pressure fell from 50 to 40 psi after 45 minutes.
- Discovered test pits dug by PREI earlier in the day. A total of 6 test pits were dug in a line between the work area and Front Street. The pits were approximately 10-feet by 10-feet with varying depths.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	2 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 6-2-03
Weather: Sunny, 60s
Observer: Eric Rogge

Activities:

_____ Site Preparation	__X__ Suction Pipe Installation
_____ Manhole Installation	_____ Water Discharge to Treatment Plant
_____ Trench Construction	_____ Other: Demobilization
_____ Soil Characterization	_____ Other_____
_____ Soil Disposal	

Description of Activities & Observations:

- Clean Ventures on-site, cleaning the 1st frac tank. Using pressure washers and degreaser to clean.
- Began pressure testing the suction header pipe again. Started test at 8:35, pressure dropped to 45 psi after 1 hour. Both cleanout caps were found to be leaking and were retightened. Started pressure test at 11:55, at 1:55 the pressure was 48 psi. A 2 psi drop over 2 hours is acceptable since the system will be running at a low vacuum.
- Richie and Art are removing rebar from the concrete and soil piles from the CT (combustion turbine) area.
- Clean Ventures was not able to get majority of the product off the sides of the frac tank. They will call Adam Sherman and set up a date to come back and finish the job. All product and wash water was put in the vac-truck. The fluid was transported to CycleChem, Inc. in Elizabeth, NJ.
- Filled the suction header trench with type 1 stone to 4-inches above the suction header.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	1 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 6-3-03
Weather: Cloudy, 60s
Observer: Eric Rogge

Activities:

_____ Site Preparation	X Suction Pipe Installation
_____ Manhole Installation	_____ Water Discharge to Treatment Plant
_____ Trench Construction	_____ Other_____
_____ Soil Characterization	_____ Other_____
_____ Soil Disposal	

Description of Activities & Observations:

- Placed electrical conduit in suction header trench from 22.5 degree elbow to the treatment plant. An electrical pull box was placed just before the cleanout approximately halfway to the treatment plant.
- Placed 6-inches of stone above the electrical conduit in the suction header trench. Spread and compacted 6-inches of unstained excavated soil in the trench. Detectable marking tape was unrolled above the compacted soil. The remainder of the trench was filled with unstained excavated soil. In the area where the suction header trench goes beneath the road, structural fill was used to backfill the trench. All unstained excavated soil was used as backfill.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	1 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 6-4-03
Weather: Rain, 50s
Observer: Eric Rogge

Activities:

____	**Site Preparation**	X	**Suction Pipe Installation**
____	**Manhole Installation**	X	**Water Discharge to Treatment Plant**
____	**Trench Construction**	____	**Other**____
____	**Soil Characterization**	____	**Other**____
____	**Soil Disposal**		

Description of Activities & Observations:

- The unfinished section of trench was filled to the top with rainwater from the overnight rain. Placed a submersible pump in the trench and pumped the water through the bag filters to the treatment plant. The puddles around the trench were drained the trench and pumped to the treatment plant.
- Graded trench area next to the treatment plant in preparation for seeding and mulch. Dug holes and set fence posts in concrete.
- Finished backfilling the suction header trench with structural fill. Spread structural fill around manhole T2.
- Clean Venture on-site to finish cleaning the frac tank. Using pressure washer, degreaser, and diesel fuel to clean product from sides of frac tank. Washwater and product was transported and disposed at CycleChem, Inc. in Elizabeth, NJ.
- Pumping large puddle behind the soil stockpile to the grassy area behind and next to the treatment plant. The water appeared clean and did not have a sheen.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	1 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 6-5-03
Weather: Rain, 60s
Observer: Eric Rogge

Activities:

_____	**Site Preparation**	_____	**Suction Pipe Installation**
_____	**Manhole Installation**	X	**Water Discharge to Treatment Plant**
_____	**Trench Construction**	X	**Other: Demobilization**
_____	**Soil Characterization**	_____	**Other**_____
_____	**Soil Disposal**		

Description of Activities & Observations:

- Roll-off arrived on-site, timbers from the CT area were loaded in it.
- The frac tank was removed from the site. A flatbed trailer was delivered to the site, Maxymillians supplies will be transported on it.
- Puddles around the soil stockpile area were pumped to the grassed area next to the soil stockpile. The puddles appeared clean and did not have a sheen.
- The treatment plant fence taken down to install the suction header trench was reinstalled by a fence subcontractor.
- Excess stone from the trench construction was spread on the access road.
- Testing suction capacity of the manhole/suction header system:
  - Connected 6-inch to 2-inch reducer on the end of the suction header pipe next to the treatment plant. Connected a 2-inch suction hose between the reducer and the 2-inch steel valve on the outside of the treatment plant (the valve was installed previously to test the system and feeds into the top of the air/water separator).
  - Shut off extraction wells. Used the vent valve on the top of the air water separator (AWS) to regulate the system vacuum to 22 in-Hg.
  - Obtained flowrate by timing the transfer pump off to transfer pump on time on the AWS. The flowrate was approximately 47 GPM. Need flowrate when manholes have been drained to bottom of suction pipe. No time remaining today to finish, will try again next week.
- Treatment plant blew fuses when the system was returned to its normal settings. Left treatment plant off for the night, Attila will repair tomorrow.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		Equipment	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	1 20,000 gal. Frac Tanks	
		Diesel Generator	

Subcontractors

Crew		Equipment	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 6-9-03
Weather: Cloudy, 60s
Observer: Eric Rogge

Activities:

_____	**Site Preparation**	_____	**Suction Pipe Installation**
_____	**Manhole Installation**	_____	**Water Discharge to Treatment Plant**
_____	**Trench Construction**	X	**Other: Demobilization**
_____	**Soil Characterization**	_____	**Other**_____
X	**Soil Disposal**		

Description of Activities & Observations:

- Began testing the new suction header system, shut off extraction wells and turned on the new suction header. Will leave system on until water in manhole drops as far as possible. Left extraction wells off and new suction header on over night.
- Transporting soil to Clean Earth in Delaware today. 17 truck loads of soil were transported for the day.
- Mike Watkins, Kim Scarborough, PADEP, and EPA on-site to observe Preferred digging test pits.
- Transported soil from CT area to Clean Earth in Delaware. 5 truck loads of soil were transported.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 6-10-03
Weather: Sunny, 70s
Observer: Eric Rogge

Activities:

____	Site Preparation	____	Suction Pipe Installation
____	Manhole Installation	X	Water Discharge to Treatment Plant
____	Trench Construction	X	Other: Demobilization
____	Soil Characterization	X	Other: Grading
X	Soil Disposal		

Description of Activities & Observations:

- The treatment plant was not drawing in any water from the new suction header, when we arrived on-site in the morning. Adjusted the vacuum on the system up to 23 in-Hg (from 22). The system resumed sucking water from the manholes. The depth to water in both manholes was 10.5'. The plant was pulling approximately 38 GPM.
- Surveyors on-site, surveying final locations of the suction header.
- A rental Cat D4C dozer was delivered to the site to be used for the final grading.
- Remaining soil in the soil stockpile was sent to Chem Clear in Delaware. 5 truck loads were shipped for the day.
- Continued running the treatment plant until lunchtime. Water level in manholes reached equilibrium, depth to groundwater in both manholes was 12'. The flowrate was approximately 10 GPM. Fuses in treatment plant blew when changing system back to extraction wells. Replaced fuses.
- Dozer grading work area starting at treatment plant side. Spreading structural fill in the manhole T2 area.
- Straightened MW-14 protective casing using dozer. Well had tilted when digging the collection trench.
- Rental vibrating drum roller delivered to the site. Rolled collection trench area closest to the chester generating station.
- Moving equipment and supplies to paved to be loaded onto the flatbed trailer.
- Placed metal fence posts around the cleanouts and pullboxes and painted orange.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 6-11-03
Weather: Cloudy, 80s
Observer: Eric Rogge

Activities:

____	Site Preparation	____	Suction Pipe Installation
____	Manhole Installation	____	Water Discharge to Treatment Plant
____	Trench Construction	X	Other: Demobilization
____	Soil Characterization	X	Other: Grading
____	Soil Disposal		

Description of Activities & Observations:

- 6 loads of topsoil delivered to the site. Used dozer to spread topsoil in collection trench area and up the suction header trench to the road. Spread topsoil around manholes, cleanouts, and pullboxes by hand.
- PREI recommended that Maxymillian take some of their excess soil and fill in the hole left in the soil stockpile location. The soil was taken from the pile of soil near the Jeffrey Street entrance and placed in one of the trucks used to deliver topsoil. 4 loads of soil were taken from the pile and placed in the soil stockpile area. Used dozer to spread out soil evenly.
- Used a push spreader to spread to seed in the soil stockpile area. The extra clean haybales left over from the soil stockpile were pulled apart and spread on the seed.
- Loading equipment and supplies on to the flatbed trailer.

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		Equipment	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	Diesel Generator	

Subcontractors

Crew		Equipment	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Date: 6-12-03
Weather: Cloudy, 80s
Observer: Eric Rogge

Activities:

_____ Site Preparation	_____ Suction Pipe Installation
_____ Manhole Installation	_____ Water Discharge to Treatment Plant
_____ Trench Construction	__X__ Other: Demobilization
_____ Soil Characterization	_____ Other_____
_____ Soil Disposal	

Description of Activities & Observations:

- Rental "mulch cannon" arrived on site. 1 load of straw delivered to the site.
- Spread seed by hand over all areas disturbed from work (area between road and river, trench areas, inside fence of treatment plant).
- Spread straw over all areas disturbed from work using "mulch cannon."

Visitors: _____

DAILY FIELD REPORT
ADDENDUM 1
CHESTER WATERFRONT REDEVELOPMENT PROJECT
CHESTER, PENNSYLVANIA

Contractor's Resources

Crew: Maxymillian Technologies		**Equipment**	
Chester Trzcinski	Foreman	Case backhoe	
Art Miekens	Operating Engineer	CAT 330L Excavator	
Yvonne Stillis	Skilled Laborer	1 Trench Box	
Creighton Richardson	Skilled Laborer	Diesel Generator	

Subcontractors

Crew		**Equipment**	

Attachments [sketches, test data, other]	

Prepared by: **Brown and Caldwell CQA Representative**

_____ **(signature)**

Reviewed by: _____ **(signature)**

APPENDIX C

LOG OF PROJECT SUBMITTALS

SUBMITTAL LOG
CHESTER WATERFRONT REDEVELOPMENT PROJECT
EXELON POWER CORPORATION
CHESTER, PENNSYLVANIA
Contractor: Brown and Caldwell Constructors

No.	Submittal Description	Ref. Spec.	Date Received	Action Taken	Action Date	Responsible Subcontractor	Comments
001	HASP	01060.1.03	9/16/02	MC	9/30/02	Maxymillian	Correct hospital
001A	Revised hospital information	01060.1.03	10/4/02	NE	10/4/02	Maxymillian	
002	Subcontractor Notification - Surveying	01050.1.04	9/16/02	NE	9/20/02	Maxymillian	Not all information provided as requested
002A	Surveying – Revised certificate of insurance	01050.1.04	9/30/02	NE	9/30/03	Maxymillian	
003	Environmental Protection Plan	01110	9/16/02	MC	9/20/02	Maxymillian	Don't discharge untreated water. Supply info on pumps. The comments were noted by Maxymillian and implemented on the Site.
004	Site Security Plan	01540-1.04	9/17/02	NE	9/20/02	Maxymillian	
005	Soil Handling Plan	02210-1.03	9/18/02	AR	9/20/02	Maxymillian	Don't discharge untreated water. Supply info on pumps. Clarify that all excavation will be characterized. The comments were noted by Maxymillian and implemented on the Site. BCC gave verbal approval.
006	Demolition Plan	02060-1.04	9/19/02	NE	9/20/02	Maxymillian	
007	Geotextile – SI Geotex 1001	02233-2.02	9/23/02	NE	10/4/02	Maxymillian	
007A	Geotextile – SI Geotex 1001 QA/QC Program, Roll Numbers, QC Results	02233-1.06C	9/30/02	NE	10/4/02	Maxymillian	
008	Information about Earthwork Equipment	02200-1.05	9/23/02	NE	9/29/02	Maxymillian	
009	Physical Testing Lab – Underwood Engineering	02200-1.05B	9/30/02	NE	10/4/02	Maxymillian	
010	Chemical Testing Lab – Val Associates		9/30/02	MC	10/4/02	Maxymillian	NJDEP Certification Expired – Verify lab has necessary certifications
010 A	Val Associates application for renewal of certification		10/8/02	MC	10/15/02	Maxymillian	Provide documentation that the disposal facilities do not require specific lab certification for proper characterization.
011	Schedule of Values	02095	9/30/02	NE	10/15/02	Maxymillian	
012	Material Source – Structural Fill	02200-1.05D	9/30/02	NE	10/4/02	Maxymillian	

LEGEND: AR = Amend and Resubmit
MC = Make Corrections Noted
NE = No Exceptions
NA =Not Applicable

SUBMITTAL LOG
CHESTER WATERFRONT REDEVELOPMENT PROJECT
EXELON POWER CORPORATION
CHESTER, PENNSYLVANIA
Contractor: Brown and Caldwell Constructors

No.	Submittal Description	Ref. Spec.	Date Received	Action Taken	Action Date	Responsible Subcontractor	Comments
013	Clean Source Cert. For Stone Sieve Analyses – 2.01(2A), 2.02 (#57), 2.03 (#3)	02200-1.05C, D	10/2/02	NE	10/21/02	Maxymillian	
014	Grading Plans – Areas 11	02200.1.05; 02510-1.04	10/15/02	AR	10/22/02	Maxymillian	Numerous comments and questions. Grading plans were later modified by BCC. See Submittal 019 below.
014A	Grading Plans – Areas 10	0220.1.05; 02510-1.04	10/15/02	AR	10/22/02	Maxymillian	Numerous comments and questions. Grading plans were later modified by BCC. See Submittal 020 below.
015	R-7 Cert. Of Compliance	02200-2.03	10/16/02	NE	10/21/02	Maxymillian	
016	Soils Analytical: 0-1800 tons for PA or 0-1500 tons for DE	NA	10/18/02	NA	NA	Maxymillian	No response warranted
016A	Soils Analytical: 1800-3500 tons for PA or 1500-3500 tons for DE	NA	10/25/02	NA	NA	Maxymillian	No response warranted
017	Area 14 Asbestos Analytical	NA	10/21/02	NA	NA	Maxymillian	No response warranted; **Corrected 10/22/02**
018	Structural Fill – Physical Properties	02200-2.03	10/21/02	NE	10/23/02	Maxymillian	
019	Grading Plan – Area 10	02510-1.04	10/28/02	revised by BCC	4/3/03	Maxymillian	Resubmittal of 014A; grading plan revised and sent to MT by BCC.
020	Grading Plan – Area 11	02510-1.04	11/14/02	revised by BCC	4/3/03	Maxymillian	Resubmittal of 014; grading plan revised and sent to MT by BCC.
021	Compaction Tests – Area 1	02200-3.05F	12/3/02	NE	12/3/02	Maxymillian	No response warranted
045	Paving Contractor	02510-1.04	6/9/03	MC	9/5/03	Maxymillian	Trinity prequalification certificate expired on 6/30/03.
046	Record Drawings (excluding Areas 10 & 11)	01050-4	11/13/03	NA	NA	Maxymillian	No response warranted
048	Photographic Record (excluding Areas 10 & 11)	01380.1.04	11/13/03	NA	NA	Maxymillian	No response warranted
050	Aggregate Base	02510-3.01	10/14/03	NE	10/15/03	Maxymillian	

LEGEND: AR = Amend and Resubmit
MC = Make Corrections Noted
NE = No Exceptions
R = Rejected
NA=Not Applicable

SUBMITTAL LOG
CHESTER WATERFRONT REDEVELOPMENT PROJECT
EXELON POWER CORPORATION
CHESTER, PENNSYLVANIA
Contractor: Brown and Caldwell Constructors

No.	Submittal Description	Ref. Spec.	Date Received	Action Taken	Action Date	Responsible Subcontractor	Comments
051	Waste Manifests (excluding Areas10 & 11)	NA	11/13/03	NA	NA	Maxymillian	No response warranted.
052	As-built Plans (Areas 10 and 11)	01050.1.04, 01700.1.04	11/24/03	AR	11/25/03	Maxymillian	Redundant data and legend correction. Comments were provided verbally to Maxymillian.
052A	As-built Plans (Areas 10 and 11)	01050.1.04, 01700.1.04	12/4/03	MC	12/4/03	Maxymillian	As-built drawing for Area 11 missing. Comments were provided verbally to Maxymillian.
052A adden.	As-built Plans (Area 11)	01050.1.04, 01700.1.04	12/11/03	NE	12/11/03	Maxymillian	

LEGEND: AR = Amend and Resubmit
MC = Make Corrections Noted
NE = No Exceptions
R = Rejected
NA=Not Applicable

SUBMITTAL LOG
CHESTER WATERFRONT REDEVELOPMENT PROJECT
ADDENDUM 1
EXELON POWER CORPORATION
CHESTER, PENNSYLVANIA
Contractor: Brown and Caldwell Constructors

No.	Submittal Description	Ref. Spec.	Date Received	Action Taken	Action Date	Respons. Vend/Sub	Comments
16B	Soils Analytical data for 1600 and 540 tons to Clean Earth Pennsylvania or Delaware		5/29/03				No response required.
22	Env. Protection Plan	01110-1.2	1/30/03	A	2/7/03	Maxymillian	
23A	Health and Safety Plan	01340-1.3	1/30/03				No response required.
24	Work Area Security Protocol	01540-1.4	1/30/03	AN	2/7/03	Maxymillian	Verify where entrance to work area will be.
24A	""	""	2/10/03	A	2/14/03	Maxymillian	
25	Soil Handling Plan	02325-1.3	1/30/03	RR	2/7/03	Maxymillian	Please provide information on the location and construction of the soil stockpile. Any water shall be contained in accordance with 02325-3.3(G). Please provide more detail in the characterization procedure (i.e., types of samples, anaylses).
25A	""	""	2/11/03	AN	2/14/03	Maxymillian	Water shall be maintained in accordance with Specification Section 02325-3.3(G)
26	Water Control/Dewatering Plan	02228-1.2	1/30/03	AN	2/7/03	Maxymillian	Please clarify the use of a 100 micron bag filter, the specifications require a max 50 micron.
26A	""	""	2/10/03	A	2/14/03	Maxymillian	
27	Lab data for Structural Fill material	02300-2.1	1/30/03	Not Approved	2/7/03	Maxymillian	The revision to spec requires minimum 15% passing #200.
27A	""	""	1/30/03	AN	2/14/03	Maxymillian	Shall be placed above 2 foot "select fill" layer to 4-inches below grade. Place material in 12 inches lifts, minimum 3 passes with compactor.
28	Lab data for Type 1 material	02300-2.2	1/31/03	AN	2/7/03	Maxymillian	Please provide a sample to this office and a second laboratory test per the spec.
28A	""	""	2/13/03	A	2/14/03	Maxymillian	
29	Lab data for Type 2 material	02300-2.3	1/31/03	AN	2/7/03	Maxymillian	Please provide a sample to this office and a second laboratory test per the spec.
29A	""	""	2/13/03	A	2/14/03	Maxymillian	
30	Lab data for Collection Pipe Bedding Material	02300-2.4	1/31/03	A	2/7/03	Maxymillian	
31	Surveyor Qualifications	01300-1.3	1/30/03	A	2/7/03	Maxymillian	
32	Construction Sequencing Plan	02931-1.4	2/3/03	AN	2/7/03	Maxymillian	Please clarify if haybales will be staked in accordance with the plans and specs in areas other than the access area.

LEGEND: A=Approved
AN = Approved as Noted
RR= Revise and Resubmit
NE = No Exceptions
NA=Not Applicable

SUBMITTAL LOG
CHESTER WATERFRONT REDEVELOPMENT PROJECT
EXELON POWER CORPORATION
ADDENDUM 1
CHESTER, PENNSYLVANIA
Contractor: Brown and Caldwell Constructors

No.	Submittal Description	Ref. Spec.	Date Received	Action Taken	Action Date	Respons. Vend/Sub	Comments
32A	""	""	2/10/03	A	2/14/03	Maxymillian	
33	Geotextile product data	02300-1.3H	2/3/03	A	2/7/03	Maxymillian	
34	Silt Fence product data and installation instructions	02931-1.4	2/6/03	AN	2/7/03	Maxymillian	Please provide the installation instructions.
34A	""	""	2/10-03	A	2/14/03	Maxymillian	
35	Product data on pipe materials, fittings and accessories	15151-1.3	2/6/03	A	2/7/03	Maxymillian	
36	Product data for manhole covers and construction; Drawing showing manhole locations, elevations, etc.	02633-1.4	2/7/03	A	2/7/03	Maxymillian	
37	Pipe Layout drawings	15151-1.3	2/10/03	AN	2/10/03	Maxymillian	Coordinate with system operator fro temporary shutdown of system. Shall not be down for longer than 24 hours. The 2-inch suction line shall be anchored to the MH using a strut channel, hangars and pipe clamp and shall be accessible from the small MH cover.
38	Lab data for Select Fill material	02300-2.1	2/13/03	AN	2/14/03	Maxymillian	A 2-foot layer of "select fill" shall be installed above the geotextile. Place in 2 12-inch lifts and compact with a minimum of 3 passes.
39	Topsoil sample		3/6/03				No response required.
40	Working Construction Schedule		3/4/03				No response required.
41	Manhole piping layout	15151-1.3	3/12/03	A	3/14/03	Maxymillian	
42	PVC pipe testing procedure	15151-1.3C	3/19/03	AN	5/13/03	Maxymillian	Removed Mention of existing 6-inch header per the design modification.
43	Soils Analytical for 900 tons soil to Clean Earth in Pennsylvania		4/23/03				No response required.
44	Soils Analytical data for 900-1800 tons to Clean Earth in Pennsylvania		4/25/03				No response required.
47	Record Drawings	01300-1.3	11/13/03	A	11/25/03	Maxymillian	
48	Construction Photographs	01330-1.3	11/12/03				No response required.

LEGEND: A=Approved
AN = Approved as Noted
RR= Revise and Resubmit
NE = No Exceptions
NA=Not Applicable

SUBMITTAL LOG
CHESTER WATERFRONT REDEVELOPMENT PROJECT
EXELON POWER CORPORATION
ADDENDUM 1
CHESTER, PENNSYLVANIA
Contractor: Brown and Caldwell Constructors

No.	Submittal Description	Ref. Spec.	Date Received	Action Taken	Action Date	Respons. Vend/Sub	Comments
49	Pipe testing results	1515-1.4	11/13/03				No response required.
51	Manifests, weight slips, and certificates of destruction	02325-1.4	11/12/03				No response required.

LEGEND: A=Approved
AN = Approved as Noted
RR= Revise and Resubmit
NE = No Exceptions
NA=Not Applicable

1. 9/30/02: Excavation at Area 1 to a depth of approximately 2 ft. Looking south.

2. 10/31/02: Structural backfill at Area 1. Looking south.

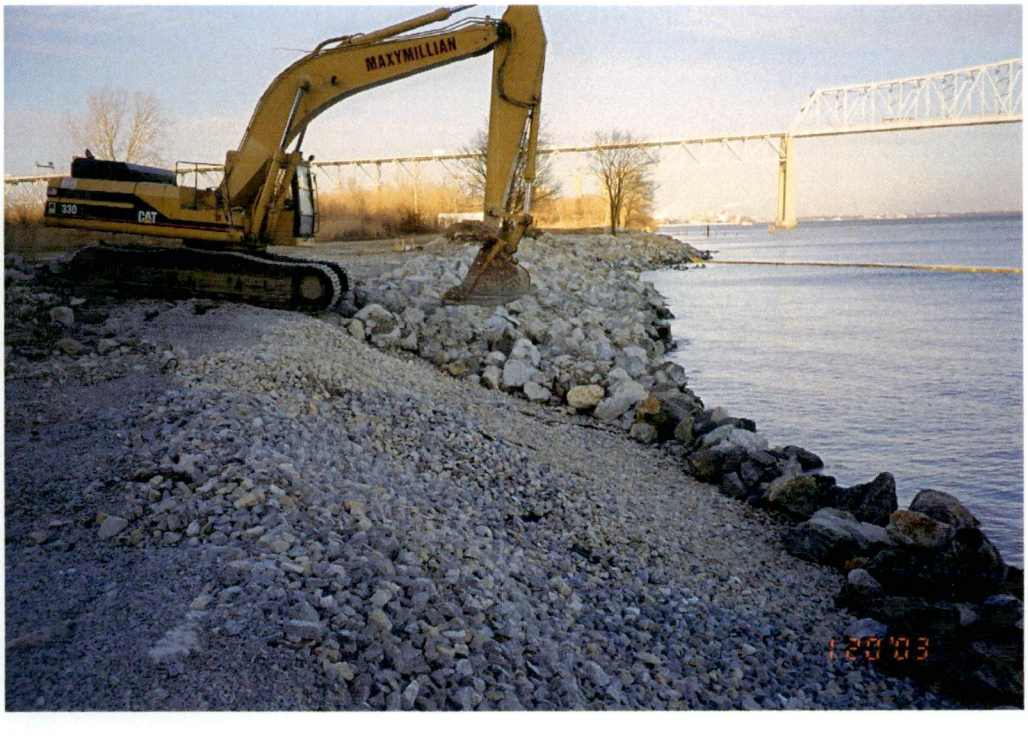
3. 9/25/02: Excavation at Area 2 to a depth of approximately 8 ft. Looking north.

4. 12/18/02: Structural backfill at Area 2. Looking east.

5. 9/30/02: Excavation to a depth of approximately 2 ft at Area 5.

6. 9/30/02: Tar-like resinous materials from Area 5.

7. 10/01/02: Backfill of Area 5 with crushed stone aggregate.



8. 1/20/03: Crushed stone and riprap placement on the riverbank. Looking east.

9. 5/12/03: Groundwater collection trench. Placing section of manhole T2, looking south-west.

10. 6/12/03: Backfilll and straw mulch over collection trench. Looking west.

11. 10/30/03: Asphalt pavement cover at Area 11. Looking south.

12. 11/6/03: Asphalt pavement cover at Area 11. Looking north.

Table E-1. Summary of Attainment Sampling Results
Chester Waterfront Redevelopment Project
Chester, Pennsylvania

Area Description	Sample ID Number	Sample Collection Date (m/d/y)	95% UCL (mg/kg)	Reported Result[a] (mg/kg)	Pass/Fail
Parcel 5b					
	AS-01	9/12/2002	NA	55	Pass
	AS-02	9/12/2002	NA	38	Pass
	AS-03	9/12/2002	NA	38	Pass
	AS-04	9/12/2002	NA	15	Pass
	AS-05	9/12/2002	NA	1.6	Pass
	AS-06	9/12/2002	NA	<1.0	Pass
	DUP-01	9/12/2002	NA	38	Pass
Excavation Area 1					
	AT-1-027	10/1/2002	82	12	Pass
	AT-1-058	10/1/2002	82	30	Pass
	AT-1-068	10/1/2002	82	56	Pass
	AT-1-075	10/1/2002	82	59	Pass
	AT-1-116	10/1/2002	82	180	Fail
	AT-1-146	10/1/2002	82	120	Fail
	AT-1-157	10/1/2002	82	23	Pass
	AT-1-163	10/1/2002	82	230	Fail
	AT-1-221	10/1/2002	82	20	Pass
	AT-1-205	10/1/2002	82	130	Fail
	AT-1-Dup	10/1/2002	82	170	Fail
	AT12-019	10/9/2002	82	190	Fail
	AT12-089	10/9/2002	82	51	Pass
	AT12-130	10/9/2002	82	52	Pass
	AT12-049	10/9/2002	82	33	Pass
	AT12-164	10/9/2002	82	40	Pass
	AT12-Dup	10/9/2002	82	62	Pass
	AT13-12	10/16/2002	82	21	Pass
	AT13-Dup	10/16/2002	82	19	Pass

a Results shown are for arsenic concentrations in samples from Parcel 5b and for Benzo(a)pyrene in samples from Areas 1 and 2.

Table E-1. Summary of Arsenic Investigation Sampling and Attainment Sampling Results for Chester Waterfront Redevelopment Remedial Action

Area Description	Sample ID Number	Sample Collection Date (m/d/y)	95% UCL (mg/kg)	Reported Result (mg/kg)	Pass/Fail
Excavation Area 2					
	AT24-020	10/7/2002	20	0.2	Pass
	AT26-020	10/7/2002	20	3	Pass
	AT24-054	10/7/2002	20	<0.073	Pass
	AT26-054	10/7/2002	20	1.4	Pass
	AT24-057	10/7/2002	20	<0.074	Pass
	AT26-057	10/7/2002	20	37 J	Fail
	AT24-095	10/7/2002	20	0.074	Pass
	AT26-095	10/7/2002	20	<0.080	Pass
	AT24-106	10/7/2002	20	0.92	Pass
	AT26-106	10/7/2002	20	0.48	Pass
	AT24-112	10/7/2002	20	<0.075	Pass
	AT26-112	10/7/2002	20	21 D	Fail
	AT24-131	10/7/2002	20	<0.074	Pass
	AT26-131	10/7/2002	20	<0.17 D	Pass
	AT24-150	10/7/2002	20	0.49	Pass
	AT26-150	10/7/2002	20	<2.6 D	Pass
	AT24-160	10/7/2002	20	0.59	Pass
	AT26-160	10/7/2002	20	2.5 D	Pass
	AT24-219	10/7/2002	20	66 D	Fail
	AT26-219	10/7/2002	20	27 D	Fail
	AT2-Dup	10/7/2002	20	3.9 D	Pass
	AT262-001	11/20/2002	20	<4.1 D	Pass
	AT242-027	11/20/2002	20	8.6 D	Pass
	AT262-027	11/20/2002	20	8.6 D	Pass
	AT22-Dup	11/20/2002	20	13 D	Pass

APPENDIX E-1

ATTAINMENT SAMPLE RESULTS FOR PARCEL 5b

ELAB of Tennessee, LLC

Date: *25-Sep-02*

CLIENT: BROWN & CALDWELL-Middleburg Heig
Project: PECO Soils
Work Order: 0209087
P. O. Number:
Date Received: 9/13/02 9:00:00 AM
Comments:
Remarks:

Work Order Sample Summary

INVOICE No.: 200005621

Lab Sample ID	Client Sample ID	Reference No.	Collection Date
0209087-01A	AS-01		9/12/02 9:00:00 AM
0209087-02A	AS-02		9/12/02 9:15:00 AM
0209087-03A	AS-03		9/12/02 9:30:00 AM
0209087-04A	AS-04		9/12/02 9:40:00 AM
0209087-05A	AS-05		9/12/02 9:50:00 AM
0209087-06A	AS-06		9/12/02 10:00:00 AM
0209087-07A	FB-01		9/12/02 10:00:00 AM
0209087-08A	DUP-01		9/12/02

CLIENT: PECO Soils

DATE RECEIVED: 09/13/02

DATE REPORTED: 09/17/02

ELAB SAMPLE NUMBER				0209087-01
CLIENT SAMPLE DESCRIPTION/SAMPLING DATE				AS-01 9/12/02 9:00:00 AM
ANALYTES	REPORTING LIMITS	USEPA METHOD	UNITS	CONC
Arsenic	1.1	6010B	mg/kg (Dry)	55
% Solids	1.0	2540**	%	87

See attached page for definition of terms and qualifiers.

227 French Landing Drive Nashville, TN 37228 615-345-1115 FAX 615-846-5426

CLIENT: PECO Soils
DATE RECEIVED: 09/13/02
DATE REPORTED: 09/17/02

ELAB SAMPLE NUMBER				0209087-02
CLIENT SAMPLE DESCRIPTION/SAMPLING DATE				AS-02 9/12/02 9:15:00 AM
ANALYTES	REPORTING LIMITS	USEPA METHOD	UNITS	CONC
Arsenic	1.2	6010B	mg/kg (Dry)	38
% Solids	1.0	2540**	%	84

See attached page for definitions of terms and qualifiers.

CLIENT: PECO Soils
DATE RECEIVED: 09/13/02
DATE REPORTED: 09/17/02

ELAB SAMPLE NUMBER				0209087-03	0209087-04
CLIENT SAMPLE DESCRIPTION/SAMPLING DATE				AS-03 9/12/02 9:30:00 AM	AS-04 9/12/02 9:40:00 AM
ANALYTES	REPORTING LIMITS	USEPA METHOD	UNITS	CONC	CONC
Arsenic	1.1	6010B	mg/kg (Dry)	38	15
% Solids	1.0	2540**	%	87	90

See attached page for definitions of terms and qualifiers.

CLIENT: PECO Soils
DATE RECEIVED: 09/13/02
DATE REPORTED: 09/17/02

ELAB SAMPLE NUMBER				0209087-05	0209087-06
CLIENT SAMPLE DESCRIPTION/SAMPLING DATE				AS-05 9/12/02 9:50:00 AM	AS-06 9/12/02 10:00:00 AM
ANALYTES	REPORTING LIMITS	USEPA METHOD	UNITS	CONC	CONC
Arsenic	1.0	6010B	mg/kg (Dry)	1.6	<1.0
% Solids	1.0	2540**	%	95	95

See attached page for definitions of terms and qualifiers.

CLIENT: PECO Soils

DATE RECEIVED: 09/13/02

DATE REPORTED: 09/17/02

ELAB SAMPLE NUMBER				0209087-07
CLIENT SAMPLE DESCRIPTION/SAMPLING DATE				FB-01 9/12/02 10:00:00 AM
ANALYTES	REPORTING LIMITS	USEPA METHOD	UNITS	CONC
Arsenic	5.0	6010B	µg/L	<5.0

See attached page for definitions of terms and qualifiers.

CLIENT: PECO Soils
DATE RECEIVED: 09/13/02
DATE REPORTED: 09/17/02

ELAB SAMPLE NUMBER				0209087-08
CLIENT SAMPLE DESCRIPTION/SAMPLING DATE				DUP-01 9/12/02
ANALYTES	REPORTING LIMITS	USEPA METHOD	UNITS	CONC
Arsenic	1.2	6010B	mg/kg (Dry)	38
% Solids	1.0	2540**	%	86

See attached page for definitions of terms and qualifiers.

ELAB

D. Rick Davis
Vice President

ANALYTICAL REPORT NOTES, TERMS AND QUALIFIERS (INORGANIC)

Notes:

The metals and cyanide reporting limits (RLs) have been statistically determined to be no less than three standard deviations as defined in 40 CFR 136, Appendix B, Revision 1.11. All other reporting limits are referenced from the specific analytical method.

Terms:

NA Not Applicable

NR Not Requested

Qualifiers:

B The reported value is less than the practical quantitation limit (PQL, project defined) but greater than or equal to the RL.

E The reported value is estimated due to the presence of matrix interference.

N Predigested spike recovery not within control limits.

* RPD or absolute difference for Duplicate analysis not within control limits.

** Reference Standard Methods 19th edition.

(1) pH analyzed outside USEPA specified holding time. pH must be measured immediately after sample collection.

(2) The sample pH did not meet the preservation guidelines. Therefore the pH was adjusted upon receipt.

(3) Reference Standard Methods 17th edition for the distillation method.

(4) The sample was analyzed out of the USEPA holding time.

(5) The sample was received in the laboratory out of the USEPA holding time.

(6) The shipping cooler temperature exceeded 6°C upon receipt to ELAB of Tennessee, LLC.

(7) Analysis was subcontracted

ASR/GEP

ELAB OF TENNESSEE CHAIN OF CUSTODY RECORD

No. 26844

Ship to:
ELAB of Tennessee
(formerly Eckenfelder Laboratory)
227 French Landing Drive
Nashville, TN 37228
Attn: Analytical Laboratory
(615) 345-1115 (phone)
(615) 846-5426 (fax)

Send Results to:
Name Mike Watkins
Company BC
Address 7550 Lucerne Dr. Suite 310
City & State Middleburg Hts, OH
Phone 440-826-4900
Fax 440 826-3400

Send Invoice To:
Name
Company
Address
City & State
Phone
Purchase Order

Details:
Page 1 of 1
Cooler No. 1 of 1
Date Shipped 9/12/02
Shipped By M. Watkins
Turnaround 48 HR.
(Std. Turn unless noted otherwise / There may be a surcharge for RUSH-contact lab)

Project No./Name

Samplers (Signature)*

Lab Use Only Lab #	Date Sampled	Time	Comp./ Grab	Sample Location/Description	Sample Matrix	Field pH/Temp	Field Cond.	ANALYSIS REQUIRED	No. of Bottles	Lab Use Only Containers/Pres.
9087-01	9/12/02	9:00	Grab	As-01	Soil			Arsenic	1	1M-UNPRES
02	"	9:15	"	As-02	"			"	"	"
03	"	9:30	"	As-03	"			"	"	"
		9:30		As-03(ms/msd)						
04		9:40		As-04						
05		9:50		As-05						
06		10:00		As-06						
07		10:00		FB-01	Water					1C-HNO3 pH<2
08				DUP-01						1M-UNPRES

Sample Kit Prep'd by: (Signature) Anthony Lewis	Date/Time 9-4-02 10:40	Received By: (Signature)
Relinquished by: (Signature)	Date/Time 9/12/02	Received By: (Signature)
Relinquished by: (Signature)	Date/Time	Received By: (Signature)
Received for Laboratory by: (Signature)	Date/Time 9-13-02 09:00	Temperature 5.3°

REMARKS
*Signature required to ensure validity

48 HR TAT

Lab Use Only			
VOA Headspace	Y	N	(NA)
Field Filtered	Y	(N)	NA
Correct Containers	(Y)	N	NA
Discrepancies	Y	(N)	NA
Cust. Seals intact	Y	N	(NA)
Containers Intact	(Y)	N	NA

Airbill # FX
CAR #

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers

APPENDIX E-2

AREA 1 ATTAINMENT SAMPLING RESULTS

October 23, 2002

Dear Mike,

I have completed the statistical calculations on Area One and, as indicated below, the results indicate that Area One is in compliance with a 95% confidence UCL of 82 mg/kg. The calculations follow.

1. Shapiro-Wilk tests were carried out on the data to determine whether they are better represented by a normal distribution or by a log-normal distribution. The test statistics were interpreted by means of Table A-17, W. J. Conover, Practical Nonparametric Statistics, 3rd ed. The number of data points in the set is 10.

   The value of W (the test statistic) for normal distribution is 0.9303, indicating that the probability that the data are normally distributed is between 0.10 and 0.50.

   The value of W for log-normal distribution is 0.9105, indicating that the probability that the data are log-normally distributed is between 0.10 and 0.50.

   One concludes that the data are best represented by a normal distribution. 95% UCLs were calculated for both distributions, however.

2. The arithmetic mean and standard deviation of the untransformed data set are

   Mean = 37.40
   Standard deviation of the data set = 16.69
   Standard deviation of the population = 17.50

   There follows calculation of the 95% UCL for the data assuming that they are normally distributed.

   The standard deviation of the mean is given by $S_x = 17.50/(10^{1/2}) = 5.53$
   The number of degrees of freedom, df, = n – 1 = 9.
   $\alpha = 0.05$ (95% confidence limit)
   for which
   t = 1.833 (D. J. Sheskin, Handbook of Parametric and Nonparametric Statistical Procedures, Table A-2)

   Then the 95% UCL is given by Mean + $t S_x = 37.40 + 1.833\,16.69/(10^{1/2}) = 47.07$ mg/kg.

   The cleanup standard is that the 95% UCL must be <= 82 mg/kg; according to this approach the standard has been met.

3. The arithmetic mean and standard deviation of the (natural) log-transformed data are given by

Mean(log) = 3.5098
S_y = 0.5309

Other parameters needed are
n (number of data points) = 10
α = 0.05

Then H = 2.266 (Table A-12, R. O. Gilbert, Statistical Methods for Environmental Pollution Monitoring)

The 95% UCL is then given by

$$UCL(95) = \exp[\ \text{Mean(log)} + 0.5S_y^2 + S_y \cdot H/(9)^{1/2}]$$

$$= \exp[\ 3.5098 + 0.5 \cdot 1(0.5309)^2 + 0.5309 \cdot 2.266/3] = \exp[\ 4.0518]$$

so

UCL(95) = 57.50 mg/kg

The UCL(95) cleanup standard is 82 mg/kg; according to this approach the cleanup standard has been met.

The data values used are 12, 30, 56, 59, 20, 51, 52, 33, 40, and 21 mg/kg

Client: PECO-Excelon #22684.003
Date Reported: 10/03/02

ELAB SAMPLE NUMBER		SBLK1002BS1	0210014-01D	0210014-02D	0210014-03D	0210014-04D
DATE SAMPLED		NA	10/01/02	10/01/02	10/01/02	10/01/02
DATE RECEIVED		NA	10/02/02	10/02/02	10/02/02	10/02/02
DATE ANALYZED		10/02/02	10/02/02	10/02/02	10/03/02	10/03/02
CLIENT SAMPLE DESCRIPTION		M.BLANK	AT-1-027	AT-1-058	AT-1-068	AT-1-075
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	CONC	10 X(1) CONC	10 X(1) CONC	20 X(1) CONC	25 X(1) CONC
Benzo(a)pyrene	330	< 330	12000 D	30000 D	56000 D	59000 D

ALL COMPOUNDS EXPRESSED IN MICROGRAMS/KILOGRAM DRY UNLESS OTHERWISE NOTED.

ALL NON-DETECT VALUES ARE REPORTED AS <EQL (MODIFIED TO REFLECT DILUTIONS/DRY WEIGHT/SAMPLE WEIGHT).

SEE ATTACHED PAGE FOR DEFINITIONS OF TERMS AND QUALIFIERS.

(1) = SAMPLES WERE DILUTED BY THE NUMERICAL VALUE DISPLAYED.
DETECTION LIMITS HAVE BEEN INCREASED BY THE SAME FACTOR.

Client: PECO-Excelon #22684.003
Date Reported: 10/03/02

ELAB SAMPLE NUMBER		0210014-05D	0210014-06D	0210014-07D	0210014-08D	0210014-09D
DATE SAMPLED		10/01/02	10/01/02	10/01/02	10/01/02	10/01/02
DATE RECEIVED		10/02/02	10/02/02	10/02/02	10/02/02	10/02/02
DATE ANALYZED		10/03/02	10/03/02	10/02/02	10/03/02	10/03/02
CLIENT SAMPLE DESCRIPTION		AT-1-116	AT-1-146	AT-1-157	AT-1-163	AT-1-221
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	50 X(1) CONC	50 X(1) CONC	5.0 X(1) CONC	50 X(1) CONC	25 X(1) CONC
Benzo(a)pyrene	330	180000 D	120000 D	23000 D	230000 D	20000 D

ALL COMPOUNDS EXPRESSED IN MICROGRAMS/KILOGRAM DRY UNLESS OTHERWISE NOTED.

ALL NON-DETECT VALUES ARE REPORTED AS <EQL (MODIFIED TO REFLECT DILUTIONS/DRY WEIGHT/SAMPLE WEIGHT).

SEE ATTACHED PAGE FOR DEFINITIONS OF TERMS AND QUALIFIERS.

(1) = SAMPLES WERE DILUTED BY THE NUMERICAL VALUE DISPLAYED.
DETECTION LIMITS HAVE BEEN INCREASED BY THE SAME FACTOR.

Client: PECO-Excelon #22684.003
Date Reported: 10/03/02

ELAB SAMPLE NUMBER		0210014-10D	0210014-11D
DATE SAMPLED		10/01/02	10/01/02
DATE RECEIVED		10/02/02	10/02/02
DATE ANALYZED		10/03/02	10/03/02
CLIENT SAMPLE DESCRIPTION		AT-1-205	AT-1-Dup
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	100 X(1) CONC	50 X(1) CONC
Benzo(a)pyrene	330	130000 D	170000 D

ALL COMPOUNDS EXPRESSED IN MICROGRAMS/KILOGRAM DRY UNLESS OTHERWISE NOTED.

ALL NON-DETECT VALUES ARE REPORTED AS <EQL (MODIFIED TO REFLECT DILUTIONS/DRY WEIGHT/SAMPLE WEIGHT).

SEE ATTACHED PAGE FOR DEFINITIONS OF TERMS AND QUALIFIERS.

(1) = SAMPLES WERE DILUTED BY THE NUMERICAL VALUE DISPLAYED.
DETECTION LIMITS HAVE BEEN INCREASED BY THE SAME FACTOR.

Elab

D. Rick Davis
Vice President

ANALYTICAL REPORT TERMS AND QUALIFIERS

EQL: The estimated quantitation limit (EQL) is defined as the estimated concentration above which quantitative results can be obtained with a specific degree of confidence. ELAB defines the EQL to be at or near the lowest calibration standard.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The chromatographic data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL.

P: The associated numerical value is an estimated quantity. There is greater than a 25% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.

Client: PECO-Excelon #22684.003
Date Reported: 10/08/02

ELAB SAMPLE NUMBER		SBLK1003B1	0210014-12
DATE SAMPLED		NA	10/01/02
DATE RECEIVED		NA	10/02/02
DATE ANALYZED		10/07/02	10/03/02
CLIENT SAMPLE DESCRIPTION		M.BLANK	AT-1-Field Blank
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	CONC	CONC
Benzo(a)pyrene	5.0	< 5.0	< 5.3

ALL COMPOUNDS EXPRESSED IN MICROGRAMS/LITER UNLESS OTHERWISE NOTED.

ALL NON-DETECT VALUES ARE REPORTED AS <EQL (MODIFIED TO REFLECT DILUTIONS/SAMPLE VOLUME).

SEE ATTACHED PAGE FOR DEFINITIONS OF TERMS AND QUALIFIERS.

Elab

D. Rick Davis
Vice President

227 French Landing Drive, Suite 550 Nashville, TN 37228 Phone:615-345-1115 Fax:615-846-5426

ANALYTICAL REPORT TERMS AND QUALIFIERS

EQL: The estimated quantitation limit (EQL) is defined as the estimated concentration above which quantitative results can be obtained with a specific degree of confidence. ELAB defines the EQL to be at or near the lowest calibration standard.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The chromatographic data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL.

P: The associated numerical value is an estimated quantity. There is greater than a 25% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.

ELAB OF TENNESSEE C...N OF CUSTODY RECORD

No. 26845

Ship to:
ELAB of Tennessee
(formerly Eckenfelder Laboratory)
227 French Landing Drive
Nashville, TN 37228
Attn: Analytical Laboratory
(615) 345-1115 (phone)
(615) 846-5426 (fax)

Send Results to:
Name Mike Watkins
Company Brown & Caldwell
Address
City & State Middleburg Heights, OH
Phone
Fax

Send Invoice To:
Name same
Company
Address
City & State
Phone
Purchase Order

Details:
Page 1 of 2
Cooler No. 1 of 1
Date Shipped 10/1/02
Shipped By Fed Ex
Turnaround 24 hr
(Std. Turn unless noted otherwise / There may be a surcharge for RUSH-contact lab)

Project No./Name 22684.003 / Exelon - PECO Attainment Sampling
Samplers (Signature)* Will Rain

Lab Use Only Lab #	Date Sampled	Time	Comp./ Grab	Sample Location/Description	Sample Matrix	Field pH/Temp	Field Cond.	ANALYSIS REQUIRED	No. of Bottles	Lab Use Only Containers/Pres.
10014-01	10/1/02	1600	grab	AT-1-027	soil	—	—	SVOC PAH 8270 Benzo(a)pyrene	1	1M-UNPRES
02				AT-1-058						
03				AT-1-068						
04				AT-1-075						
05				AT-1-116						
06				AT-1-146						
~~08~~				AT-1-146 MS/MSD						
07 ~~08~~				AT-1-157						
0808				AT-1-163						
0940				AT-1-221						

CF 10-2-02

Sample Kit Prep'd by: (Signature) Anthony Lewis	Date/Time 9-4-02 16:40	Received By: (Signature) Will Rain
Relinquished by: (Signature) Will Rain	Date/Time 10/1/02 1800	Received By: (Signature)
Relinquished by: (Signature)	Date/Time	Received By: (Signature)
Received for Laboratory by: (Signature)	Date/Time 10-2-02 0900	Temperature 3.0°C

REMARKS
*Signature required to ensure validity

Lab Use Only

VOA Headspace	Y	N	(NA)
Field Filtered	Y	(N)	NA
Correct Containers	(Y)	N	NA
Discrepancies	Y	(N)	NA
Cust. Seals intact	Y	N	(NA)
Containers Intact	(Y)	N	NA

Airbill # FED-X
CAR #

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers

ELAB OF TENNESSEE CHAIN OF CUSTODY RECORD

No. 26846

Ship to:
ELAB of Tennessee
(formerly Eckenfelder Laboratory)
227 French Landing Drive
Nashville, TN 37228
Attn: Analytical Laboratory
(615) 345-1115 (phone)
(615) 846-5426 (fax)

Send Results to:
Name Mike Watkins
Company Brown & Caldwell
Address
City & State Middleburg Heights, OH
Phone
Fax

Send Invoice To:
Name same
Company
Address
City & State
Phone
Purchase Order

Details:
Page 2 of 2
Cooler No. 1 of 1
Date Shipped 10/1/02
Shipped By FedEx
Turnaround 24 hr
(Std. Turn unless noted otherwise / There may be a surcharge for RUSH-contact lab)

Project No./Name 22684.003/Exelon-PECO Attainment Sampling
Samplers (Signature)* Will Rain

Lab Use Only Lab #	Date Sampled	Time	Comp./ Grab	Sample Location/Description	Sample Matrix	Field pH/Temp	Field Cond.	ANALYSIS REQUIRED	No. of Bottles	Lab Use Only Containers/Pres.
10014-10	10/1/02	1600	grab	AT-1-205	soil	—	—	SVOC PAH 8270 Benzo(a)pyrene	1	1H NON
11				AT-1-Dup						
12				AT-1-Field Blank	Water					

Sample Kit Prep'd by: (Signature) Anthony Rain	Date/Time 9-4-02 16:40	Received By: (Signature) Will Rain
Relinquished by: (Signature) Will Rain	Date/Time 10/1/02 1800	Received By: (Signature)
Relinquished by: (Signature)	Date/Time	Received By: (Signature)
Received for Laboratory by: (Signature) Anthony Rain	Date/Time 10-2-02 09:00	Temperature 3.0°C

REMARKS
*Signature required to ensure validity

Lab Use Only			
VOA Headspace	Y	N	(NA)
Field Filtered	Y	(N)	NA
Correct Containers	(Y)	N	NA
Discrepancies	Y	(N)	NA
Cust. Seals intact	Y	N	(NA)
Containers Intact	(Y)	N	NA

Airbill # FED-X
CAR #

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers

Client: PECO-Excelon #22684.003
Date Reported: 10/11/02

ELAB SAMPLE NUMBER		SBLK1010BS1	0210085-01D	0210085-02D	0210085-03D	0210085-04D
DATE SAMPLED		NA	10/09/02	10/09/02	10/09/02	10/09/02
DATE RECEIVED		NA	10/11/02	10/11/02	10/11/02	10/11/02
DATE ANALYZED		10/10/02	10/11/02	10/11/02	10/11/02	10/11/02
CLIENT SAMPLE DESCRIPTION		M.BLANK	AT12-019	AT12-089	AT12-130	AT12-049
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	CONC	60 X(1) CONC	65 X(1) CONC	70 X(1) CONC	65 X(1) CONC
Benzo(a)pyrene	67	< 67	190000 D	51000 D	52000 D	33000 D

ALL COMPOUNDS EXPRESSED IN MICROGRAMS/KILOGRAM DRY UNLESS OTHERWISE NOTED.

ALL NON-DETECT VALUES ARE REPORTED AS <EQL (MODIFIED TO REFLECT DILUTIONS/DRY WEIGHT/SAMPLE WEIGHT).

SEE ATTACHED PAGE FOR DEFINITIONS OF TERMS AND QUALIFIERS.

(1) = SAMPLES WERE DILUTED BY THE NUMERICAL VALUE DISPLAYED.
DETECTION LIMITS HAVE BEEN INCREASED BY THE SAME FACTOR.

227 French Landing Drive, Suite 550 Nashville, TN 37228 Phone:615-345-1115 Fax:615-846-5426

Client: PECO-Excelon #22684.003
Date Reported: 10/11/02

ELAB SAMPLE NUMBER		0210085-05D	0210085-06D
DATE SAMPLED		10/09/02	10/09/02
DATE RECEIVED		10/11/02	10/11/02
DATE ANALYZED		10/11/02	10/11/02
CLIENT SAMPLE DESCRIPTION		AT12-164	AT12-Dup
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	70 X(1) CONC	70 X(1) CONC
Benzo(a)pyrene	67	40000 D	62000 D

ALL COMPOUNDS EXPRESSED IN MICROGRAMS/KILOGRAM DRY UNLESS OTHERWISE NOTED.

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(1) = SAMPLES WERE DILUTED BY THE NUMERICAL VALUE DISPLAYED.
DETECTION LIMITS HAVE BEEN INCREASED BY THE SAME FACTOR.

Elab

D. Rick Davis
Vice President

ANALYTICAL REPORT TERMS AND QUALIFIERS

EQL: The estimated quantitation limit (EQL) is defined as the estimated concentration above which quantitative results can be obtained with a specific degree of confidence. ELAB defines the EQL to be at or near the lowest calibration standard.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The chromatographic data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL.

P: The associated numerical value is an estimated quantity. There is greater than a 25% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.

ELAB OF TENNESSEE C[illegible]N OF CUSTODY RECORD

No. 20841

Ship to:
ELAB of Tennessee
(formerly Eckenfelder Laboratory)
227 French Landing Drive
Nashville, TN 37228
Attn: Analytical Laboratory
(615) 345-1115 (phone)
(615) 846-5426 (fax)

Send Results to:
Name Mike Watkins
Company Brown & Caldwell
Address
City & State Middleburg Heights, OH
Phone
Fax

Send Invoice To:
Name same
Company
Address
City & State
Phone
Purchase Order

Details:
Page 1 of 1
Cooler No. 1 of 1
Date Shipped 10/9/02
Shipped By FedEx
Turnaround 24hr
(Std. Turn unless noted otherwise / There may be a surcharge for RUSH-contact lab)

Project No./Name Exelon / PECO Attainment Sampling 22684.003

Samplers (Signature)* Brill Rainer

Lab Use Only Lab #:	Date Sampled	Time	Comp./ Grab	Sample Location/Description	Sample Matrix	Field pH/Temp	Field Cond.	ANALYSIS REQUIRED	No. of Bottles	Lab Use Only Containers/Pres.
10085-01	10/9/02	PM	grab	AT12-019	soil	—	—	SVOC PAH 8270 Benzo(a) pyrene	1	1m-unpres
-02				AT12-019 MS/MSD						
-03				AT12-089						
-04				AT12-130						
-05				AT12-049						
-06				AT12-164						
-07				AT12-Dup						
				AT12-Field Blank	water					1H-

Sample Kit Prep'd by: (Signature) Anthony Lum	Date/Time 9-4-02 14:40	Received By: (Signature) Brill Rainer
Relinquished by: (Signature) Brill Rainer	Date/Time 10/9/02 1900	Received By: (Signature)
Relinquished by: (Signature)	Date/Time	Received By: (Signature)
Received for Laboratory by: (Signature)	Date/Time 10-10-02 0900	Temperature 3.0°C

REMARKS
*Signature required to ensure validity

Lab Use Only

VOA Headspace	Y	N	(NA)
Field Filtered	Y	(N)	NA
Correct Containers	(Y)	N	NA
Discrepancies	Y	(N)	NA
Cust. Seals intact	Y	N	(NA)
Containers Intact	(Y)	N	NA

Airbill #
CAR #

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers

Client: PECO Excelon #22684.003
Date Reported: 10/24/02

ELAB SAMPLE NUMBER		SBLK1018B1	0210157-03
DATE SAMPLED		NA	10/16/02
DATE RECEIVED		NA	10/17/02
DATE ANALYZED		10/22/02	10/22/02
CLIENT SAMPLE DESCRIPTION		M.BLANK	AT13-Field Blank
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	CONC	CONC
Benzo(a)pyrene	5.0	< 5.0	< 5.0

ALL COMPOUNDS EXPRESSED IN MICROGRAMS/LITER UNLESS OTHERWISE NOTED.

ALL NON-DETECT VALUES ARE REPORTED AS <EQL (MODIFIED TO REFLECT DILUTIONS/SAMPLE VOLUME).

SEE ATTACHED PAGE FOR DEFINITIONS OF TERMS AND QUALIFIERS.

Elab

D. Rick Davis
Vice President

227 French Landing Drive Nashville, TN 37228 615-345-1115 FAX 615-846-5426

ANALYTICAL REPORT TERMS AND QUALIFIERS

EQL: The estimated quantitation limit (EQL) is defined as the estimated concentration above which quantitative results can be obtained with a specific degree of confidence. ELAB defines the EQL to be at or near the lowest calibration standard.

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D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The chromatographic data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL.

P: The associated numerical value is an estimated quantity. There is greater than a 25% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.

Client: PECO Excelon #22684.003
Date Reported: 10/21/02

ELAB SAMPLE NUMBER		SBLK1018BS1	0210157-01D	0210157-02D
DATE SAMPLED		NA	10/16/02	10/16/02
DATE RECEIVED		NA	10/17/02	10/17/02
DATE ANALYZED		10/18/02	10/21/02	10/21/02
CLIENT SAMPLE DESCRIPTION		M.BLANK	AT13-12	AT13-DUO
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	CONC	5.0 X(1) CONC	5.0 X(1) CONC
Benzo(a)pyrene	67	< 67	21000 D	19000 D

ALL COMPOUNDS EXPRESSED IN MICROGRAMS/KILOGRAM DRY UNLESS OTHERWISE NOTED.

ALL NON-DETECT VALUES ARE REPORTED AS <EQL (MODIFIED TO REFLECT DILUTIONS/DRY WEIGHT/SAMPLE WEIGHT).

SEE ATTACHED PAGE FOR DEFINITIONS OF TERMS AND QUALIFIERS.

(1) = SAMPLES WERE DILUTED BY THE NUMERICAL VALUE DISPLAYED.
DETECTION LIMITS HAVE BEEN INCREASED BY THE SAME FACTOR.

Elab

D. Rick Davis
Vice President

227 French Landing Drive, Suite 550 Nashville, TN 37228 Phone:615-345-1115 Fax:615-846-5426

ANALYTICAL REPORT TERMS AND QUALIFIERS

EQL: The estimated quantitation limit (EQL) is defined as the estimated concentration above which quantitative results can be obtained with a specific degree of confidence. ELAB defines the EQL to be at or near the lowest calibration standard.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The chromatographic data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL.

P: The associated numerical value is an estimated quantity. There is greater than a 25% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.

ELAB OF TENNESSEE C N OF CUSTODY RECORD

No. 26841

Ship to:
ELAB of Tennessee
(formerly Reinfelder Laboratory)
224 French Landing Dr.
Nashville, TN 37228
Attn: Analytical Laboratory
(615) 345-1115 (phone)
(615) 846-5426 (fax)

Send Results to:
Name Mike Watkins
Company Brown & Caldwell
Address
City & State Middleburg Heights, OH
Phone
Fax

Send Invoice To:
Name same
Company
Address
City & State
Phone
Purchase Order

Details:
Page 1 of 1
Cooler No. 1 of 1
Date Shipped 10/16/02
Shipped By FedEx
Turnaround ~~24 hr~~
(Std. Turn unless noted otherwise / There may be a surcharge for RUSH-contact lab)

Project No./Name 22684.003 / PECO-Exelon Attainment

Samplers (Signature)* Will Ramin

Lab Use Only Lab #	Date Sampled	Time	Comp./ Grab	Sample Location/Description	Sample Matrix	Field pH/Temp	Field Cond.	ANALYSIS REQUIRED	No. of Bottles	*Lab Use Only* Containers/Pres.
02	10/16/02	PM	grab	AT13-12	soil	—	—	PAH SVOC 8270 Benzo(a)pyrene	1	
	↓	↓	↓	AT13-12 MS/MSD	soil	↓	↓	↓	↓	
02				AT13-Dup	soil					
03	↓	↓	↓	AT13-Field Blank	water	↓	↓	↓	↓	14 10Pl

Sample Kit Prep'd by: (Signature) Anthony Lemm	Date/Time 9-4-02 16:40	Received By: (Signature) Will Ramin
Relinquished by: (Signature) Will Ramin	Date/Time 10/16/02 1700	Received By: (Signature)
Relinquished by: (Signature)	Date/Time	Received By: (Signature)
Received for Laboratory by: (Signature)	Date/Time 10-17-02 1235	Temperature 2.7

REMARKS
*Signature required to ensure validity
Need results Monday
10/21/02

Lab Use Only

VOA Headspace	Y	N	NA
Field Filtered	Y	N	NA
Correct Containers	Y	N	NA
Discrepancies	Y	N	NA
Cust. Seals Intact	Y	N	NA
Containers Intact	Y	N	NA

Airbill # 4861
CAR #

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers

APPENDIX E-3

AREA 2 ATTAINMENT SAMPLING RESULTS

May 14, 2003

Dear Mike, Dale, and Will,

I have completed the statistical calculations on Area Two using the new data and, as indicated below, the results indicate that Area Two is well in compliance with a 95% confidence UCL of 20 mg/kg. The calculations follow.

1. Shapiro-Wilk tests were carried out on the data to determine whether they are better represented by a normal distribution or a log-normal distribution. The test statistics were interpreted by means of Table A-17, W.J. Conover, Practical Nonparametric Statistics, 3rd ed. The number of data points in the set is 21.

   The value of W (the test statistic) for normal distribution of the data is 0.7023, indicating that the probability that the data are normally distributed is less than 0.01.

   The value for W for log-normal distribution of the data is 0.9066, indicating that the probability that the data are log-normally distributed is about 0.05.

   One concludes that the data are not well represented by either a normal or a log-normal distribution. The 95% UCL was calculated for both distributions, however, and was also estimated (more reliably in my opinion) by a simple nonparametric technique.

2. The arithmetic mean and standard deviation of the untransformed data set are
   Mean = 1.81 mg/kg
   Standard deviation of the data set = 2.55
   Standard deviation of the population = 2.62

   There follows calculation of the 95% UCL for the data assuming that they are normally distributed.

   The standard deviation of the mean is given by $S_x = 2.62 / (21^{1/2}) = 0.572$
   The number of degrees of freedom, df, = n – 1 = 20
   α = 0.05 (95% confidence limit)
   for which
   t = 1.725 (D.J. Sheskin, Handbook of Parametric and Nonparametric Statistical Procedures, Table A-2)

   Then the 95% UCL is given by Mean + $t S_x$ = 1.81 + 1.725 X 0.572 = 2.80 mg/kg

   The cleanup standard is that the 95%R UCL must be <= 20 mg/kg; according to this approach the standard has been met.

3. The arithmetic mean and standard deviation of the (natural) log-transformed data

are given by

Mean (log) = - 0.6618
$S_y = 1.8054 / (21^{1/2}) = 0.3940$
Other parameters needed are
n (number of data points)= 21
$\alpha = 0.05$
Then H = 1.905 (Table A-12, R.O. Gilbert, Statistical Methods for Environmental Pollution Monitoring)

The 95% UCL is then given by

$$UCL(95) = \exp[\text{Mean(log)} + 0.5S_y^2 + S_yH/(20^{1/2})]$$

$$= \exp[- 0.6618 + .5 \text{ X } 0.1552 + 1.905 \text{ X } .3940/(20^{1/2})] = 0.6594 \text{ mg/kg}$$

so

UCL(95) = 0.6594 mg/kg

The UCL(95) cleanup standard is 20 mg/kg; therefore according to this approach the cleanup standard has been met.

4. The data values used are 0.037, 0.073, 0.074, 0.074, 0.074, 0.075, 0.080, 0.17, 0.20, 0.48, 0.49, 0.59, 0.92, 1.4, 2.5, 2.6, 3.0, 3.9, 4.1, 8.6, and 8.6 mg/kg. Since the data are neither normally distributed nor log-normally distributed, the use of the two approaches described above is of dubious validity; one would be better advised to use a simple nonparametric approach. For these 21 data values, the UCL(95) is 8.6 mg/kg, in compliance with the UCL(95) cleanup standard of 20 mg/kg.

With best regards,

Dave Wilson

Client: PECO-Excelon #22684.003
Date Reported: 10/10/02

ELAB SAMPLE NUMBER		SBLK1008BS1	SBLK1009BS	0210055-01	0210055-02	0210055-03
DATE SAMPLED		NA	NA	10/07/02	10/07/02	10/07/02
DATE RECEIVED		NA	NA	10/08/02	10/08/02	10/08/02
DATE ANALYZED		10/08/02	10/09/02	10/09/02	10/09/02	10/09/02
CLIENT SAMPLE DESCRIPTION		M.BLANK	M.BLANK	AT24-020	AT26-020	AT24-054
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	CONC	CONC	CONC	CONC	CONC
Benzo(a)pyrene	67	< 67	< 67	200	3000	< 73

ALL COMPOUNDS EXPRESSED IN MICROGRAMS/KILOGRAM DRY UNLESS OTHERWISE NOTED.

ALL NON-DETECT VALUES ARE REPORTED AS <EQL (MODIFIED TO REFLECT DILUTIONS/DRY WEIGHT/SAMPLE WEIGHT).

SEE ATTACHED PAGE FOR DEFINITIONS OF TERMS AND QUALIFIERS.

Client: PECO-Excelon #22684.003
Date Reported: 10/10/02

ELAB SAMPLE NUMBER		0210055-04	0210055-05	0210055-06	0210055-07	0210055-08
DATE SAMPLED		10/07/02	10/07/02	10/07/02	10/07/02	10/07/02
DATE RECEIVED		10/08/02	10/08/02	10/08/02	10/08/02	10/08/02
DATE ANALYZED		10/10/02	10/09/02	10/09/02	10/09/02	10/09/02
CLIENT SAMPLE DESCRIPTION		AT26-054	AT24-057	AT26-057	AT24-095	AT26-095
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	CONC	CONC	CONC	CONC	CONC
Benzo(a)pyrene	67	1400	< 74	37 J	74	< 80

ALL COMPOUNDS EXPRESSED IN MICROGRAMS/KILOGRAM DRY UNLESS OTHERWISE NOTED.

ALL NON-DETECT VALUES ARE REPORTED AS <EQL (MODIFIED TO REFLECT DILUTIONS/DRY WEIGHT/SAMPLE WEIGHT).

SEE ATTACHED PAGE FOR DEFINITIONS OF TERMS AND QUALIFIERS.

Client: PECO-Excelon #22684.003
Date Reported: 10/10/02

ELAB SAMPLE NUMBER		0210055-09	0210055-10	0210055-11	0210055-12D	0210055-13
DATE SAMPLED		10/07/02	10/07/02	10/07/02	10/07/02	10/07/02
DATE RECEIVED		10/08/02	10/08/02	10/08/02	10/08/02	10/08/02
DATE ANALYZED		10/10/02	10/09/02	10/09/02	10/09/02	10/09/02
CLIENT SAMPLE DESCRIPTION		AT24-106	AT26-106	AT24-112	AT26-112	AT24-131
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	CONC	CONC	CONC	40 X(1) CONC	CONC
Benzo(a)pyrene	67	920	480	< 75	21000 D	< 74

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SEE ATTACHED PAGE FOR DEFINITIONS OF TERMS AND QUALIFIERS.

(1) = SAMPLES WERE DILUTED BY THE NUMERICAL VALUE DISPLAYED.
DETECTION LIMITS HAVE BEEN INCREASED BY THE SAME FACTOR.

Client: PECO-Excelon #22684.003
Date Reported: 10/10/02

ELAB SAMPLE NUMBER		0210055-14D	0210055-15	0210055-16D	0210055-17	0210055-18D
DATE SAMPLED		10/07/02	10/07/02	10/07/02	10/07/02	10/07/02
DATE RECEIVED		10/08/02	10/08/02	10/08/02	10/08/02	10/08/02
DATE ANALYZED		10/09/02	10/09/02	10/09/02	10/09/02	10/10/02
CLIENT SAMPLE DESCRIPTION		AT26-131	AT24-150	AT26-150	AT24-160	AT26-160
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	2.0 X(1) CONC	CONC	30 X(1) CONC	CONC	10 X(1) CONC
Benzo(a)pyrene	67	< 170 D	490	< 2600 D	590	2500 D

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SEE ATTACHED PAGE FOR DEFINITIONS OF TERMS AND QUALIFIERS.

(1) = SAMPLES WERE DILUTED BY THE NUMERICAL VALUE DISPLAYED.
DETECTION LIMITS HAVE BEEN INCREASED BY THE SAME FACTOR.

Client: PECO-Excelon #22684.003
Date Reported: 10/10/02

ELAB SAMPLE NUMBER		0210055-19D	0210055-20D	0210055-21D
DATE SAMPLED		10/07/02	10/07/02	10/07/02
DATE RECEIVED		10/08/02	10/08/02	10/08/02
DATE ANALYZED		10/09/02	10/09/02	10/10/02
CLIENT SAMPLE DESCRIPTION		AT24-219	AT26-219	AT2-DUP
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	50 X(1) CONC	50 X(1) CONC	10 X(1) CONC
Benzo(a)pyrene	67	66000 D	27000 D	3900 D

ALL COMPOUNDS EXPRESSED IN MICROGRAMS/KILOGRAM DRY UNLESS OTHERWISE NOTED.

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Elab

D. Rick Davis
Vice President

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E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The chromatographic data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL.

P: The associated numerical value is an estimated quantity. There is greater than a 25% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.

Client: PECO-Excelon #22684.003
Date Reported: 10/31/02

ELAB SAMPLE NUMBER		SBLK1010B1	0210055-22	0210085-07
DATE SAMPLED		NA	10/07/02	10/09/02
DATE RECEIVED		NA	10/08/02	10/11/02
DATE ANALYZED		10/11/02	10/11/02	10/11/02
CLIENT SAMPLE DESCRIPTION		M.BLANK	AT2-Field Blank	AT12-Field Blank
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	CONC	CONC	CONC
Benzo(a)pyrene	5.0	< 5.0	< 5.2	< 5.3

ALL COMPOUNDS EXPRESSED IN MICROGRAMS/LITER UNLESS OTHERWISE NOTED.

ALL NON-DETECT VALUES ARE REPORTED AS <EQL (MODIFIED TO REFLECT DILUTIONS/SAMPLE VOLUME).

SEE ATTACHED PAGE FOR DEFINITIONS OF TERMS AND QUALIFIERS.

Elab

D. Rick Davis
Vice President

227 French Landing Drive, Suite 550 Nashville, TN 37228 Phone:615-345-1115 Fax:615-846-5426

ANALYTICAL REPORT TERMS AND QUALIFIERS

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E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The chromatographic data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL.

P: The associated numerical value is an estimated quantity. There is greater than a 25% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.

ELAB OF TENNESSEE C...N OF CUSTODY RECORD

No 26843

Ship to:
ELAB of Tennessee
(formerly Eckenfelder Laboratory)
227 French Landing Drive
Nashville, TN 37228
Attn: Analytical Laboratory
(615) 345-1115 (phone)
(615) 846-5426 (fax)

Send Results to:
Name Mike Watkins
Company Brown & Caldwell
Address
City & State Middleburg Heights, OH
Phone
Fax

Send Invoice To:
Name Same
Company
Address
City & State
Phone
Purchase Order

Details:
Page 1 of 3
Cooler No. 1 of 1
Date Shipped 10/7/02
Shipped By FedEX
Turnaround 24hr
(Std. Turn unless noted otherwise / There may be a surcharge for RUSH-contact lab)

Project No./Name Exelon/PECO 22684.003

Samplers (Signature)* Will Rain

Lab Use Only Lab #	Date Sampled	Time	Comp./ Grab	Sample Location/Description	Sample Matrix	Field pH/Temp	Field Cond.	ANALYSIS REQUIRED	No. of Bottles	Lab Use Only Containers/Pres.
10055-01	10/7/02	PM	grab	AT24-020	soil	—	—	SVOC PAH 8270 Benzo(a)pyrene	1	1M-UNPRES
02				AT26-020						
03				AT24-054						
				AT24-054 MS/MSD						
04				AT26-054						
05				AT24-057						
06				AT26-057						
07				AT24-095						
08				AT26-095						
09				AT24-106						

	Date/Time	Received By: (Signature)
Sample Kit Prep'd by: (Signature) Anthony Rainey	9-4-02 16:40	Will Rain
Relinquished by: (Signature) Will Rain	10/7/02 1900	Received By: (Signature)
Relinquished by: (Signature)	Date/Time	Received By: (Signature)
Received for Laboratory by: (Signature)	Date/Time 10-8-02 900	Temperature 6.0°C

REMARKS
*Signature required to ensure validity

Suggestion: Open containers under hood.

Lab Use Only
VOA Headspace Y N (NA)
Field Filtered Y (N) NA
Correct Containers (Y) N NA
Discrepancies Y (N) NA
Cust. Seals intact (Y) N (NA)
Containers Intact (Y) N NA
Airbill # FX
CAR #

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers

ELAB OF TENNESSEE C...N OF CUSTODY RECORD

No. 26842

Ship to:
ELAB of Tennessee
(formerly Eckenfelder Laboratory)
227 French Landing Drive
Nashville, TN 37228
Attn: Analytical Laboratory
(615) 345-1115 (phone)
(615) 846-5426 (fax)

Send Results to:
Name Mike Watkins
Company Brown & Caldwell
Address
City & State
Phone
Fax

Send Invoice To:
Name same
Company
Address
City & State
Phone
Purchase Order

Details:
Page 2 of 3
Cooler No. 1 of 1
Date Shipped 10/7/02
Shipped By FedEx
Turnaround 24hr
(Std. Turn unless noted otherwise / There may be a surcharge for RUSH-contact lab)

Project No./Name

Samplers (Signature)*

Lab Use Only Lab #	Date Sampled	Time	Comp./ Grab	Sample Location/Description	Sample Matrix	Field pH/Temp	Field Cond.	ANALYSIS REQUIRED	No. of Bottles	Lab Use Only Containers/Pres.
10055-10	10/7/02	PM	grab	AT26-106	soil	—	—	SVOC PAH 8270 Benzo(a)pyrene	1	1M-UNPRES
11				AT24-112						
12				AT26-112						
13				AT24-131						
14				AT26-131						
15				AT24-150						
16				AT26-150						
17				AT24-160						
18				AT26-160						
19				AT24-219						

	Date/Time	Received By: (Signature)
Sample Kit Prep'd by: (Signature) Anthony Lino	9-4-02 16:40	Will Ramsey
Relinquished by: (Signature) Will Ramsey	10/7/02 1900	Received By: (Signature)
Relinquished by: (Signature)	Date/Time	Received By: (Signature)
Received for Laboratory by: (Signature)	Date/Time 10-8-02 0900	*Temperature* 6.0°

REMARKS
*Signature required to ensure validity

Suggestion: Open containers under hood

Lab Use Only

VOA Headspace	Y	N	(NA)
Field Filtered	Y	(N)	NA
Correct Containers	(Y)	N	NA
Discrepancies	Y	(N)	NA
Cust. Seals intact	(Y)	N	(NA)
Containers Intact	(Y)	N	NA

Airbill # FX

CAR #

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers

ELAB OF TENNESSEE C...IN OF CUSTODY RECORD

No. 26841

Ship to:
ELAB of Tennessee
(formerly Eckenfelder Laboratory)
227 French Landing Drive
Nashville, TN 37228
Attn: Analytical Laboratory
(615) 345-1115 (phone)
(615) 846-5426 (fax)

Send Results to:
Name Mike Watkins
Company Brown & Caldwell
Address
City & State
Phone
Fax

Send Invoice To:
Name same
Company
Address
City & State
Phone
Purchase Order

Details:
Page 3 of 3
Cooler No. 1 of 1
Date Shipped 10/7/02
Shipped By FedEx
Turnaround 24hr
(Std. Turn unless noted otherwise / There may be a surcharge for RUSH-contact lab)

Project No./Name Exelon/PECO 22684.003

Samplers (Signature)*

Lab Use Only Lab #	Date Sampled	Time	Comp./ Grab	Sample Location/Description	Sample Matrix	Field pH/Temp	Field Cond.	ANALYSIS REQUIRED	No. of Bottles	Lab Use Only Containers/Pres.
10055-20	10/7/02	PM	grab	AT26-219	soil	—	—	SVOC PAH 8270 Benzo(a)pyrene	1	1M-UNPRES
21	↓	↓	↓	AT2-Dup	↓	↓	↓	↓	↓	↓
22	↓	↓	↓	AT2-Field Blank	water	↓	↓	↓	↓	1H-UNPRES

Sample Kit Prep'd by: (Signature) Anthony Lima	Date/Time 9-4-02 14:40	Received By: (Signature)
Relinquished by: (Signature)	Date/Time 10/7/02 1900	Received By: (Signature)
Relinquished by: (Signature)	Date/Time	Received By: (Signature)
Received for Laboratory by: (Signature)	Date/Time 10-8-02 900	Temperature 6.0°C

REMARKS
*Signature required to ensure validity
suggestion: open containers under hood

Lab Use Only			
VOA Headspace	Y	N	(NA)
Field Filtered	Y	(N)	NA
Correct Containers	(Y)	N	NA
Discrepancies	Y	(N)	NA
Cust. Seals intact	Y	N	(NA)
Containers Intact	(Y)	N	NA

Airbill #
CAR #

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers

Client: PECO Excelon #22684.003
Date Reported: 11/25/02

ELAB SAMPLE NUMBER		SBLK1121BS1	0211151-01D	0211151-02D	0211151-03D	0211151-04D
DATE SAMPLED		NA	11/20/02	11/20/02	11/20/02	11/20/02
DATE RECEIVED		NA	11/21/02	11/21/02	11/21/02	11/21/02
DATE ANALYZED		11/21/02	11/21/02	11/21/02	11/21/02	11/21/02
CLIENT SAMPLE DESCRIPTION		M.BLANK	AT262-001	AT242-027	AT262-027	AT22-Dup
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	CONC	10 X(1) CONC	10 X(1) CONC	10 X(1) CONC	10 X(1) CONC
Benzo(a)pyrene	330	< 330	< 4100 D	8600 D	8600 D	13000 D

ALL COMPOUNDS EXPRESSED IN MICROGRAMS/KILOGRAM DRY UNLESS OTHERWISE NOTED.

ALL NON-DETECT VALUES ARE REPORTED AS <EQL (MODIFIED TO REFLECT DILUTIONS/DRY WEIGHT/SAMPLE WEIGHT).

SEE ATTACHED PAGE FOR DEFINITIONS OF TERMS AND QUALIFIERS.

(1) = SAMPLES WERE DILUTED BY THE NUMERICAL VALUE DISPLAYED.
DETECTION LIMITS HAVE BEEN INCREASED BY THE SAME FACTOR.

Elab

D. Rick Davis
Vice President

227 French Landing Drive, Suite 550 Nashville, TN 37228 Phone:615-345-1115 Fax:615-846-5426

Client: PECO Excelon #22684.003
Date Reported: 11/25/02

ELAB SAMPLE NUMBER		SBLK1121B1	0211151-05
DATE SAMPLED		NA	11/20/02
DATE RECEIVED		NA	11/21/02
DATE ANALYZED		11/22/02	11/22/02
CLIENT SAMPLE DESCRIPTION		M.BLANK	AT22-Field Blank
BASE NEUTRAL ORGANICS BY USEPA METHOD 8270	EQL	CONC	CONC
Benzo(a)pyrene	5.0	< 5.0	< 5.3

ALL COMPOUNDS EXPRESSED IN MICROGRAMS/LITER UNLESS OTHERWISE NOTED.

ALL NON-DETECT VALUES ARE REPORTED AS <EQL (MODIFIED TO REFLECT DILUTIONS/SAMPLE VOLUME).

SEE ATTACHED PAGE FOR DEFINITIONS OF TERMS AND QUALIFIERS.

Elab

D. Rick Davis
Vice President

227 French Landing Drive, Suite 550 Nashville, TN 37228 Phone:615-345-1115 Fax:615-846-5426

ANALYTICAL REPORT TERMS AND QUALIFIERS

EQL: The estimated quantitation limit (EQL) is defined as the estimated concentration above which quantitative results can be obtained with a specific degree of confidence. ELAB defines the EQL to be at or near the lowest calibration standard.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The chromatographic data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL.

P: The associated numerical value is an estimated quantity. There is greater than a 25% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.

ELAB OF TENNESSEE C...N OF CUSTODY RECORD

No 27277

Ship to:
ELAB of Tennessee
(formerly Eckenfelder Laboratory)
227 French Landing Drive
Nashville, TN 37228
Attn: Analytical Laboratory
(615) 345-1115 (phone)
(615) 846-5426 (fax)

Send Results to:
Name Dale Showers
Company Brown & Caldwell
Address
City & State Nashville
Phone
Fax

Send Invoice To:
Name same
Company
Address
City & State
Phone
Purchase Order

Details:
Page 1 of 1
Cooler No. 1 of 1
Date Shipped 11/20/02
Shipped By Fed Ex
Turnaround ~~24 hr~~ 48 hr
(Std. Turn unless noted otherwise / There may be a surcharge for RUSH-contact lab)

Project No./Name Exelon/PECO 22684.003 Area 2 Round 2
Samplers (Signature)* Will Rain

Lab Use Only Lab #	Date Sampled	Time	Comp./ Grab	Sample Location/Description	Sample Matrix	Field pH/Temp	Field Cond.	ANALYSIS REQUIRED	No. of Bottles	Lab Use Only Containers/Pres.
11151-01 A	11/20/02	13:30	grab	AT262-001	soil	—	—	SVOC PAH 8270 Benzo(a)pyrene	1	1A-NOA
02				AT262-001 MS/MSD					1	
03				AT242-027					1	
04	03			AT262-027					1	
05	04			AT22-Dup					1	
06	05			AT22-Field Blank	water	—	—		1	1B NOA

	Date/Time	Received By: (Signature)
Sample Kit Prep'd by: (Signature) Anthony Rains	11-1-02 13:30	Will Rain
Relinquished by: (Signature) Will Rain	11/20/02 17:30	Received By: (Signature)
Relinquished by: (Signature)	Date/Time	Received By: (Signature)
Received for Laboratory by: (Signature)	Date/Time 11-21-02 0900	*Temperature* 3.0°C

REMARKS
*Signature required to ensure validity

Lab Use Only
VOA Headspace Y N (NA)
Field Filtered Y (N) NA
Correct Containers (Y) N NA
Discrepancies Y (N) NA
Cust. Seals intact Y N (NA)
Containers Intact (Y) N NA
Airbill # Fed Ex
CAR #

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers